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SECRETARY'S NOTES.

- 1. Her Majesty the Queen visited the Institution on Wednesday, 25th October, and inspected the collection of Nelson Relics on exhibition in the Museum. Her Majesty remained for upwards of an hour, and expressed great satisfaction with the visit.
 - 2. Other Royal visitors to the Nelson Exhibition have been :-

Field-Marshal H.R.H, the Duke of Connaught, K.G., etc.

H.R.H. the Duchess of Connaught.

H.R.H. Princess Patricia of Connaught.

H.R.H. Prince Edward of Wales. H.R.H. Prince Albert of Wales.

H.R.H. Princess Henry of Battenberg.

H.H. Prince Leopold of Battenberg. H.H. Prince Maurice of Battenberg.

H.I.H. Prince Arisugawa of Japan.

- 3. The Council have decided to institute experimentally courses of lectures on the military history subjects set for the examination of officers for promotion. The first course of ten lectures will commence early in January, and will embrace the subjects of the May examinations. lecturer for this course will be Dr. T. M. Maguire. The charge to Members of the Institution for the course will be 10s. 6d., to other officers one guinea. Officers wishing to attend this course should apply to the Secretary as early as possible.
- 4. The Exhibition of Nelson Relics will be on view until the end of November. The charge of admission to the public is now sixpence, the ordinary fee; and members can introduce two friends as usual.
- 5. On Trafalgar Day, 21st October, upwards of two thousand persons visited the Museum, which is the largest number recorded in one day. The band of the Greenwich Hospital School played a selection of music in the Gallery, and the boys sang glees.
- 6. The Army Council having sanctioned the publication of a Cavalry Journal, the Council of the Institution have granted permission for its being edited at and issued from the Institution. The first number will appear on 1st January, 1906.

7. The following officers became members of the Institution during the month of October :-

Second-Lieutenant R. R. Curling, R.G.A. Assistant-Paymaster G. R. Lees, R.N. (Retired). Lieut.-Colonel E. A. H. Webb, late 17th Foot.

Major F. A. Maxwell, B.C., D.S.O., Indian Army.

Captain H. St. G. Hamersley, R.G.A. Lieut.-Colonel R. Hoare, 4th Hussars.

Colonel J. A. F. Nutt, late R.A.

Captain H. N. R. Cowie, D.S.O., Dorsetshire Regiment.

Captain H. M. Johnstone, late R.E.

J. F. Ruthven, Esq., late Lieutenant R.N.R.

Captain W. J. R. Wingfield, 19th Hussars.

Captain J. C. Robertson, W.I.R. Commander G. H. Baird, R.N.

Lieutenant O. H. Dawson, R.N.

Lieutenant J. Stirling, 7th V.B. Royal Scots. Lieutenant C. E. D. Lowe, 2nd Middlesex R.G.A. (V.).

Lieut.-Colonel G. M. Heath, D.S.O., R.E.

Major E. P. Brooker, R.E.

Lieutenant G. A. Wells, R.N. Lieutenant R. P. McHardy, R.N. Lieut.-Colonel E. W. C. Chaytor, New Zealand Militia. Major G. H. Lawrence, East Lancashire Regiment.

Lieutenant H. M. V. Barrow, Cameron Highlanders,

Lieutenant W. G. Stonor, King's Own Scottish Borderers.

Brigadier-General C. J. Blomfield, C.B., D.S.O.

Major N. J. G. Cameron, Cameron Highlanders.

Lieutenant R. E. Key, York and Lancaster Regiment.

Major H. N. M. Thoyts, 8th Hussars.

Second-Lieutenant P. F. Villiers, 14th Hussars.

Major W. F. Lascelles, Scots Guards.

Lieutenant E. H. Brassey, 1st Life Guards.

Captain D'A. Legard, 17th Lancers.

Captain A. J. D. Hay, 3rd Battalion East Surrey Regiment.

Second-Lieutenant G. R. Burnett-Stuart, R.F.A.

Lieutenant D. C. Brown, 1st Dragoon Guards.

Lieutenant W. Nunn, R.N.

Lieut.-Colonel C. J. Matthews-Donaldson, Royal Anglesey R.E. (M.).

Major W. Burton-Stewart, Lothian and Berwickshire I.Y.

(Every branch of the Service is represented by the above list, which is satisfactory.)

8. The following additional lectures have been arranged:-

Thursday, 18th January: -- "Military Hygiene on Active Service." By Major T. H. J. C. Goodwin, D.S.O., R.A.M.C.

Wednesday, 24th January :- "Military Ballooning." By Lieut .-Colonel J. E. Capper, C.B., R.E.

The Council regret that they have as yet been unable to arrange for any suitable naval lectures for the present session, but hope that it may be possible to secure some a little later on.

9. The following exhibits have been added to the Museum during the month :-

- Shoulder-belt Plate, 58th Regiment, given by R. B. Armstrong, Esq.
- Small oak Box, being a portion of Lord Nelson's last "pillow." 2. After the battle of Trafalgar, as there were no appliances for embalming the body of Lord Nelson, it was placed in a cask which was then filled up with spirit, and his head was supported inside the cask on a block of oak. On the arrival of the body in England it was transferred to a leaden coffin, which was then enclosed in a wooden one made from a spar of the French ship "L'Orient," destroyed at the battle of When the body was removed from its temporary coffin (the cask), several of the officers wishing for mementos of their late commander, the wood of the cask and of the oak "pillow" was converted into small snuff-boxes, medal boxes, etc., and distributed among the surviving officers. Amongst these was a young midshipman, who afterwards succeeded to the title and estates of the Earldom of Egmont, and who, as his share, received this medal box-into which was inserted a small gold plate bearing the inscription, "Nelson's Last Pillow." Given by Barao de Soutellinho.
- Case of 56 Regimental Buttons, in use prior to 1881, of Line and Militia Battalions. Given by the Secretary of State for War.
- 4. Portrait of Admiral P. Rainier.

Peter Rainier, son of Peter Rainier of Sandwich, entered the Navy in 1756 on board H.M.S. "Oxford." He was present at the siege of Pondicherry in June, 1760, on board H.M.S. "Norfolk," bearing the flag of Rear-Admiral C. Stevens, and at the reduction of Manila on the same ship when flag-ship of Vice-Admiral Samuel Cornish. He took part in the operations under Sir Edward Hughes in the reduction of Negapatam and Trincomalee. Rainier was promoted Rear-Admiral on 1st June, 1795, and Vice-Admiral in February, 1799. He was Commander-in-Chief of the East India Station, and in the Trafalgar promotion of 9th November, 1805, he was promoted Admiral. He died on 7th April, 1808, leaving £250,000 towards the reduction of the National Debt. Given by Admiral B. W. Page.

- The Official Despatch from Vice-Admiral Lord Collingwood to Lord Robert Fitzgerald, H.B.M. Minister at Lisbon, announcing the victory of Trafalgar and the death of Lord Nelson. Lent by Rev. R. P. Barron.
- 6. Sword of Admiral Villeneuve, Commander-in-Chief of the combined fleets of France and Spain, surrendered to Lord Collingwood at the battle off Cape Trafalgar, 21st October, 1865. It was offered to Captain Atcherley, of the Marines, who took possession of the "Bucentaure" when she struck to the "Conqueror," Captain Pellew. Atcherley refused to accept it, and took Villeneuve in his boat that he might surrender to Captain Pellew. The "Conqueror" had, however, gone off to engage the "Santissima Trinidada," and the French Admiral finally surrendered his sword to the first lieutenant of the "Mars," who took it to Lord Collingwood. Lent by the Rev. R. P. Barron.

- Sword of the Spanish Rear-Admiral Don B. H. de Cisneros, taken prisoner on board his flag-ship, the "Santissima Trinidada," at the Battle of Trafalgar. Lent by the Rev. R. P. Barron.
- Silvered Bronze Group, executed this year by Cavaliere Professeur Constantino Barbella, of Rome, depicting Lord Nelson being carried to the cockpit of H.M.S. "Victory" after receiving his mortal wound. Lent by the Sculptor.
- A Painting in Oils, by W. Hodges, R.A., who accompanied the expedition, of Captain James Cook, the Circumnavigator, landing at Mallicolo, one of the New Hebrides, in July, 1744. Lent by H. Arthurton, Esq.
- 10. Military Essays for the 1905 Gold Medal.

Essays bearing the following mottoes have been received up to 11th November:—

"Jehovah Jireh."

"I labour for peace, but when I speak unto them thereof they make ready for battle."

"Suum cuique."

"Tria juncta in uno."

"Tanam malati."

"God helps those who help themselves" (a).

"Pro aris et focis."

"God helps them that help themselves" (b).

"Union is strength."

"Providence helps those who help themselves."

"Floreat Britannia."

"Semper paratus."

11. The Treasury have consented to provide, from the Royal Mint, a complete collection of all the medals with the total number of their respective clasps, which have been issued to the Navy and Army. It is hoped that these medals will be on exhibition in the Museum early in the new year; they will undoubtedly be of very great interest.

The celebrated collection of medals, owned by Major-General Lord' Cheylesmore, C.V.O., which has been on exhibition in the Museum for several years, is to be re-arranged in new cases, which will be fixed to a large screen, so that the collection may be seen more conveniently.

- 12. Officers are reminded of the necessity of communicating all changes of address and rank to the Secretary.
- 13. Members of the Lending Library, when returning books, are requested to see that they are properly packed, as many books have been returned lately in a dilapidated condition.

CAPTURE AT SEA: MODERN CONDITIONS AND THE ANCIENT PRIZE LAWS.

By DOUGLAS OWEN, Esq., Barrister-at-Law, Inner Temple,

Author of "Declaration of War: A Survey of the Position of Belligerents and Neutrals, with Relative Considerations of Shipping and Marine Insurance, etc."

Thursday, 6th April, 1905.
Colonel Sir H. M. HOZIER, K.C.B., in the Chair.

I SUPPOSE it may safely be said that since history began there has been no century so full of changes as the nineteenth. Changes in territorial possessions, in international law, in the basis of maritime warfare, in methods of communication, in systems of trade. And these changes have acted and re-acted one on the other until there is hardly a direction in which it cannot be truly said that the former things have passed away. In most instances the fact becomes obvious the moment we begin to reflect upon it. But there is one notable instance in which we are at a disadvantage. We know well enough what were the value and extent of the right of capture of the enemy's ships and cargoes in former days; but these days were 90 years ago. From then till now we have been at peace upon the seas. Consequently we can only arrive at a conclusion as to the nature and extent of the changes by comparing the former conditions of maritime warfare with those which the progress and evolution of close upon a century have imposed upon us. What I hope to do this afternoon is to make it clear to you that, in fact, both the ancient right itself and its value and effects have shared in the widespread change; have shared in it, indeed, to an extent which, on a calm review, seems to demand the serious attention of the Empire. The best way to set about the task which I have undertaken is, I think, to carry you back to the times that were; to place before you the conditions as they used to be; and then to indicate the many and important ways in which the former things have passed away. I offer no excuses for repetition of this phrase either now or later on. For my object is to make it clear that the former things have very greatly passed away, and that with this silent and, to a great extent, unnoticed passing, the right and the opportunity of prize-making have entered on a new and very different phase.

THE COLONIAL SYSTEM.

The great discoveries, some three centuries ago, of Vasco de Gama in what we call the Old World, and of Christopher Columbus vol. xLIX.

in the New, placed Portugal and Spain in possession of sources of wealth as vast as they were new and wonderful. In the distant East and on the long road to it, Portugal gained concessions, established factories, and founded colonies. In the West, Spain occupied new lands, and claimed possession over a prolific archipelago. The rival States of Holland, England, and France were not slow to perceive the advantages which the enterprise of their great navigators had conferred on Portugal and Spain. They hastened to follow the tracks new marked to commerce. As the result, in course of time the several maritime States all found themselves more or less in jealous rivalry in distant seas. Quarrels commencing in Europe were fought out in Eastern seas and on Western shores and isles, and at their conclusion lightly-held territories were not seldom found to have changed their owners. The process was through generations a recurring one. We have only to refer to the history of almost any one of the settlements in question to realise the fact. Ceylon in the East. We read of the invasion of the Portuguese in 1505; of the capture of Colombo by the Dutch in 1603, followed by "frequent conflicts"; and then in 1795 of the final seizure of the island by the British. Cape Colony, "the half-way house to India": first Portuguese, then Dutch, then British, next restored to Holland, then again seized by the British and retained. Mauritius: discovered by the Portuguese, occupied and subsequently abandoned by the Dutch, occupied as the rich "Ile de France" by the French in 1715, and seized and retained by England about a century later. The gold-producing territory of Guinea: first Portuguese, then Dutch, now British. Dominica: first Spanish, then British, then French, then again British. Demerara: Dutch, British, Dutch, and again British. Trinidad: Spanish, British, French, and finally British. Hispania, San Domingo or Haiti-the first two names common in the old days of capture: first Spanish at the cost, it is said, of 3,000,000 lives, native men, women, and children, then French, and now a Black Republic. You will recognise the fact that for two centuries colonial possession, as between the European States, was in a condition of unstable equilibrium; it was a case of:-

"The good old rule, the simple plan: 'He may take who has the power, And he may keep who can.'"

"The object of each nation," says Professor Seeley, "was to increase its trade, not by waiting on the wants of mankind, but by getting exclusive possessions of some rich tract in the New World." Colonies or settlements so acquired became, in effect, part and parcel of the parent State. They were supplied and governed from home, and their trade was made a close preserve to the motherland. This was known as the Colonial System, often referred to in prize court judgments as the enemy's "privileged trade." And when war broke out and the enemy sought to escape the pressure which our cruisers exercised on his trade, colonial and coastal, by licensing neutral ships to help him in his difficulty, we seized the neutral ships. We regarded them as enemy transports. To this stringent rule we allowed for a lengthy period no exception, but eventually we modified it only to this extent: that neutral ships might carry cargo from the enemy's colonies to British ports or to the neutral ports at which the carrying ships or their cargoes themselves were owned. Captain

Mahan explains that the war-drain on our sailors compelled us to relax the stringency of our laws in order that we might receive neutral assistance in our immense trade; but any vessel trading between the enemy mother country and its possessions was deemed an enemy vessel and her cargo enemy property. It is easy to see that with the various States engaged in an eager competition for territory, occasion for dispute was ever present; the relation was one in which commerce and hostilities were intermixed. Commerce led to war, and war fostered commerce. War fostered commerce partly because the States supported to the utmost the national trade, and partly because they encouraged the building of ships to be used in war, which ships, when peace was restored, served to swell the fleets of commerce. A ship in those days was available either for peaceful or for warlike uses. In Pepys's Diary, for example, we find the great diarist pressing the owners of half a dozen merchantmen to lend them to the Admiralty to be used as ships of war against the Dutch. Now, the Dutch had been for 80 years at war with Spain—a war which came to end in 1648, with Holland strong upon the seas and the possessor of rich colonial settlements. With her numerous fleets released for commerce, she was free to fetch and carry for all the world. Amsterdam was the world's exchange. The ships of the Dutch outnumbered ours even in the ports of our own colonies. The position was intolerable to us, and in 1651 we set ourselves to wrest from the opulent and commercial Dutch Republic the carrying trade of Europe.

THE BRITISH NAVIGATION ACT.

This great Act of 1651, directed principally against the Dutch, was at the outset, and for very long remained, the Magna Charta of our shipping trade. By it we closed absolutely the ports of all our American and West Indian colonies and our foreign settlements generally to all foreign vessels whatever. Foreign vessels might not "come to, trade in, or traffic with" them. Moreover, we declared that in future many important articles of trade should be imported, wherever from, only in British vessels. Great was the indignation of the Dutch at what they described as "a vile act and War ensued between us and Holland. In 1667 we were once more at peace, but the possession of the sea was claimed as In five years' time, however, we were again fighting the Dutch, and presently the French. Between 1700 and 1814 we fought France during 47 years, Spain 46 years, and Holland 11 yearssometimes singly, sometimes two at once, sometimes all together. It was a constant struggle for territory across the seas. At the middle of the 18th century we were regarded by all the world as a maritime despot, aiming at the destruction of the trade of other The Armed Neutrality against us was the outcome of this sentiment. We carried on our trade, so to say, with our knife between our teeth, ever engaged in the defence of our own colonies and shipping and the capture of the enemy's. We captured sometimes a colony, sometimes single ships, sometimes a convoyed fleet. Our war-ships and a venomous brood of privateers were ever bringing prizes to our ports. Privateers were financed and fitted out as speculations. They were the prospective gold mines of the day, and rich sometimes were the veins they struck. Even Pepys and his fellow members of the Naval Board found it not inconsistent with

their position to run, as a financial venture, a "private man-of-war." Said Pepys, referring to her: "I hope we shall do pretty well toward getting a penny." No wonder, then, that when in 1781, as Laughton tells us, war broke out with Holland, on the 2nd January, thirteen days after the declaration of war, 545 letters of marque passed the Stamp Office. The nation tingled with the lust for prizes. And no great wonder at it.

CAPTURE OF ENEMY SHIPS AND GOODS.

One can hardly read of our ancient prizes even to-day without in some degree realising the excitement and enthusiasm which they must have caused. In the short war with Holland (1652-1654) we are said to have taken 1,700 prizes, worth £6,000,000. If this-£6,000,000 was the money value of that day, and not its present equivalent, some of these prizes must have been of very great value, for in our following war of 1665-1667 the average value of our prizes was apparently about only £800 apiece. The MS. prize court returns of that date, now in the British Museum, show grand total sale proceeds, £676,248. The total captures were apparently about 800 The cargo of one of them sold for close on £15,000, and some eight or ten ranged in value from £6,000 to £14,000. Many, however, sold for quite paltry sums, the average being, as I have said, about £800 per ship. So that it is easy to imagine what the excitement must have been at captures of ships in cases where the Dutch or Spaniards seem to have put a large proportion of their eggs into one basket. The Spaniards especially, for it was they who, with their almost fabulous shipments from the New World, chiefly made the name of Prize so dear to us. In 1657 they loaded us with treasure. We seized two of their galleons, a portion of the great Mexican silver fleet, so richly laden with gold and jewels that it took 38 wagons to carry the treasure from Portsmouth to London, which it entered, we are told, with great pomp. The Spaniards were a naval bank to us. In 1702 we took from them in Vigo Bay 15 huge galleons, the value of the prize being estimated at not less than £2,000,000 of our money. The great galleon captured by Anson in 1743 contained treasure worth £500,000. It was landed at Portsmouth, sent up to London, and paraded in triumph through the city in a procession of 32 wagons, the ship's company marching with colours flying and hand playing. Six years later we made a capture from the French-£300,000 in specie-which also was paraded through the city streets. Then, in 1761, came the great capture — the historic capture—of the "Hermione," the Spanish treasure-ship from The admiral and captains received as their share £65,000 apiece, the lieutenants £13,000, warrant officers about £4,000, petty officers nearly £2,000, and even the common seamen £500 per man. We all know the story of how the men on arriving at Portsmouth bought up all the watches in the place and fried them over the galley fire. On the outbreak of the war with Holland in 1781, we captured at St. Eustatia, in the West Indies, a fleet of above 150 merchantmen, mostly laden with valuable cargoes. In 1796 two frigates and a privateer captured a Dutch fleet of immense value; out of 72 vessels only 3 escaped. In 1799 four men-of-war captured off Cape Finisterre two Spanish treasure-ships. So vast was the booty that when the prizes reached Plymouth it required 63 artillery wagons to convey

it to the citadel. In 1804 we lay in wait for and captured two more treasure-ships, of which the value was immense. I may remark that we were not actually at war with Spain at the time; but this was a secondary consideration. Then came the "Pallas's" great prizes in 1806. After capturing ship after ship on the way to Spain, freighted with diamonds, dollars, and ingots, the "Pallas" sailed into Plymouth, each of her mastheads decorated with a massive golden candlestick, originally shipped at Mexico for some cathedral of Old Spain. No wonder that the King's Navy and its friends ashore thought much of the possibilities of prize. Owners of privateers, too, and their crews, and the speculators sending them to sea made numerous and splendid hauls. In 1778 the "Two Brothers," of Liverpool, captured a French East Indiaman with a cargo valued at 2,000,000 livres or more. The "Amazon" in the following year captured and brought into Cork a Spanish galleon from Manila, "carrying the King of Spain's gold and silver," valued at above £1,000,000. In 1793 the "Pilgrim" captured a French East Indiaman with a cargo valued at £190,000. And so on. The excitement and the interest were constantly kept at the highest pitch, by captures

big and little, whenever we went to war.

Still, it is just as well to remember that the game was not all So little, indeed, was this the case that it seems more than doubtful whether if the individuals who made money over the system had been those who suffered by it, they would have looked upon it favourably at all. Captain Mahan mentions that the French privateer "Bordelais," captured by us in 1799, is reported to have taken in four years 164 prizes, of the net value of £1,000,000 sterling. Between May, 1756, and July, 1757, we took from the French 681 merchantmen and 91 privateers. But there was a set-off: they had taken of our ships 637—637 as against our 772. It was not much satisfaction to our traders that against their own loss of 637 ships other than themselves had taken even more prizes from the French. The American War of Independence began in 1775. As the result of an inquiry before the House of Lords in February, 1778, we read that the value of prizes taken from us had been £1,800,000, against prizes taken by us worth £1,808,000 - only £8,000 more. The stupendous loss to cur traders by the stoppage of business through fear of capture was not assessed. Our merchants had, in fact, whenever we were at war, a very bad time. Theirs were the losses but not the prizes. They frequently complained bitterly. In 1814, for example, grievous complaints, as the result of public meetings, were addressed by Liverpool both to the Admiralty and to the Prince Regent personally. In the same year a Glasgow meeting addressed strong representations to the Throne on the neglect of the Admiralty. The losses suffered by the Clyde, it was declared, were injurious to commerce, humbling to our pride, and discreditable to the directors of the nation's naval power. Liverpool and Glasgow were in tears at their losses. I am aware that in these remarks on so sordid a consideration as the losses suffered by our shipowners and merchants I am travelling rather wide; but I feel bound to be just to my subject as a whole. Gold and ingots and diamonds captured from the enemy, with golden candlesticks a-top of the captor's masts, were after all only one side—the bright side—of the shield. Returning, however, to the bright side, let me recall the fact that, vast as was the wealthhis ships and their affreightments—which in the days referred to we

captured from the enemy, we had means of indirectly supplementing it. One of these was by the declaring of blockades.

BLOCKADES.

The history of our maritime wars is more or less a history of blockades. In old days we blockaded the enemy's ports, sometimes this or that, sometimes these or those, for a variety of reasons: To prevent his war-ships from getting out and preying upon our commence or adding to the strength of his fleets; to prevent supplies from leaving for his colonies; to prevent supplies from his colonies from getting in. We stopped or tried to stop all ocean traffic and all coastal traffic with the port or ports blockaded. The ports were his country's mouths, and by closing them we hoped to occasion him, and no doubt very often did occasion him, a maximum of discomfort or possibly of distress. Neutral vessels which were tempted by the hope of gain to carry on the enemy's trade we seized for breach or contemplated breach of our blockade. The prizes which thus fell into our lap were neither few nor far between. A neutral vessel which sailed with intent to break our blockade was ipso facto, with its cargo, prize of war.

ENEMY GOODS IN NEUTRAL SHIPS.

We who have so recently suffered greatly, both commercially and in our amour-propre, by the seizure of our vessels suspected of carrying contraband of war, may imagine how great was the exasperation of neutral States in former days when their ships were being continually stopped and searched, and often carried into belligerent ports on suspicion of carrying enemy goods. In numerous instances it was agreed by special international treaty that, as between the contracting States, the character of the vessel should determine that of the cargo, and Great Britain herself was party to several of such compacts. In 1780, as a counter-blast to a pronouncement issued by France insisting on the universal adoption of this principle, we promulgated an order affirming the ancient right. On this was issued by the various Powers the famous declaration which brought us face to face with the great maritime confederacy known as the Armed Neutrality. We would have none of the new pretension, and in 1799, being then at war with France, we made this very clear. that the practice and the law were this: that if the enemy carried his property under his own flag we condemned both ship and cargo; if he put his property under the neutral flag, enemy property it still remained, the neutral flag notwithstanding. The old prize court decisions indicate clearly enough that this was a right of no mean value, both to our Navy and our privateers.

Putting privateers out of the question, the number of captures by our public ships was very great; so great, indeed, as to call for explanation. Our habitual and systematic practice of sending out independent cruisers had certainly much to do with it.

INDEPENDENT CRUISING.

In the old days, whilst a small warlike fleet or squadron might sail with instructions and an object more or less definite, the con-

ditions required that a good deal of latitude should be left with the commander. Communications were so slow that conditions changed weeks or months before news of the change reached England or the combatants, and commanders had to act for the best in the conditions as they found them. Thus we read of a fleet on the way to lay siege to Pondicherry attempting to surprise Mauritius; and a squadron frustrated at one point in the West Indies promptly sails off and is successful at another. Time was no particular object, and was We were filled up by cruising in the track of merchant shipping. continually sending out expeditions to every part of the world, with more or less of a roving commission, to damage the enemy, ashore or afloat, as opportunity might seem to offer. The seas, too, were swarming with privateers preying on our commerce, and to keep these in check independent cruising was a necessity. Small fleets conveyed convoys out, and were free for prize-making on completion of their mission. Small squadrons were specially told off to lie in wait for particular trading fleets. Single ships were sent out here and there. We sent out reliefs and stores to our colonial naval bases; frigates were sent off with despatches; vessels, one or two at a time, were sent off to cruise in the neighbourhood of the fleet controlling them. Ships came home for repair and sailed again, and always with a lively sense of the possibilities of prize. seas about Europe," says Captain Mahan, "were alive with British cruisers, each one of which was wide-awake for prizes." In 1813 the "Phœbe," after sharing in an attack on Madagascar, sailed right across the Indian and Pacific Oceans, to cruise off South America. As a special and well-earned compliment to the frigates "Amethyst' and "Emerald," the admiral of the Biscay Fleet in 1809 gave their captains leave to cruise for a month on their own account away from the fleet; and they took at least a prize a week. We fought and cruised at large from Havannah in the west, to Manila in the east. We blockaded Brest, attacked Cherbourg, bombarded Havre, assaulted Rochefort. We were everywhere at once, in fleets, in detachments, in companion cruisers, and in single ships. So much was this the case that a considerable portion-in Vol. 5, 80 pp.-of each volume of "James's Naval History" is devoted to the history of "Light Squadrons and Single Ships," and of their gallant fights and many and valuable prizes. It is stated in that interesting work, "The Liverpool Privateers," that in 1807 we possessed 1,060 men-of-war, and in those days there was open to the smallest of these a capital chance of prize.

MERCHANT FLEETS UNDER ARMED CONVOY.

The system of convoy was in former times a special feature of maritime warfare. Whether on the whole it gave greatly increased safety to trade it is difficult to say. I am myself rather inclined to think that while it proved a great protection against privateers, which would naturally avoid trying conclusions with the convoying ship or ships-of-war, a whole fleet of merchantmen would be a strong attraction to war-ships as distinguished from privateers. Over and over again we did, in fact, after overcoming or driving off the sheep-dogs, take possession of the whole flock, and sometimes, notably at the hands of the Dutch in 1665, it was similarly our own fleet to which this happened. The late Admiral Colomb, in an address

delivered in this room in March, 1887, referring to our loss of convoyed ships in 1794, said:—"These gains to the enemy and losses to us showed the futility of the system of convoy," unless with a guard of overwhelming strength; otherwise the convoy was a "mockery of protection." It would be easy to mention many important captures of convoyed fleets by our war-ships, but a reference to the history of our Mediterranean campaign of 1812-1814 shows that the flotillas which we then captured or destroyed were both numerous and valuable.

Whether the capture was of single ship or of a fleet, condemnation was required to validate the prize. The conditions formerly prevailing were such as greatly to assist the captors.

CONDEMNATION OF PRIZES.

In old times the traditional usage was such as to afford considerable facilities for the condemnation of our prizes. The old records mention over and over again that this or that of our vessels had carried a prize or prizes into Leghorn, Madeira, Messina, Naples, and elsewhere in the Mediterranean. The Gentleman's Magazine, for example, for November, 1746, mentions that 16 French ships had thus been sent into Leghorn or Messina to be condemned. Lord Stowell pronounced the practice to be bad in international law; but as we had ourselves long been guilty of it, he declined to declare it illegal when exercised against ourselves. It was, of course, the first object of the captor to get his prize safely into port, there to lie until the papers had been sent to England and the order of the prize court had come back. Consequently, a state of the law which enabled captors to carry a prize into a neutral port near at hand, and leave them free to renew their quest for prizes, was a distinct advantage. I mention this subject of facilities of bringing in prizes for condemnation much in the same sense as I referred to the sailing of merchant fleets under convoy-not as being of great moment in itself, but as a condition of maritime warfare which, with many others, has undergone material change. What these changes are we will now consider. The first of them is easy to identify.

THE GREAT GEOGRAPHICAL CHANGE.

Instead of this head I might have said "Our Unquestioned Supremacy at Sea," for in the old days, broadly stated, the degree of a nation's supremacy at sea was largely the measure of its colonial possessions. At the conclusion of the prolonged warfare which came to an end in 1815, our mastery of the seas was beyond dispute, and with this mastery came to us the various foreign possessions for which the several maritime Powers had long contended. If you look at any old list of prizes you will find that the ships were very largely bound to or from this or that foreign possession, though the same possession might chance sometimes to be Spanish, sometimes Dutch, or sometimes French. Let me mention some of those most frequently figuring in the old prize lists:—Ceylon, Mauritius, Cape Colony, Guinea, Dominica, Trinidad, St. Vincent, St. Lucia, Demerara, Granada, French Canada. These now are ours, and their trade is ours. If we were again at war with their former

owners the rich prizes which the hostilities of former times provided for us will have vanished from the seas. When we took possession of the tree we acquired the fruit. And, for the most part, what has not passed into our possession has become independent of its Ayres, Chili, former proprietorship. Buenos Rico, San Domingo, the Philip-Mexico, Porto Cuba, pines; in the event of war between us and their former European owners they will, for any purposes of prizeproducing trade, practically have disappeared from the map. splendid Spanish galleons, laden with gold and silver from Mexico and Chili, Manila, and Peru; the tall Spanish merchantmen, laden with the wealth of the New World, which came staggering home into the arms of our expectant fleets, are gone-for good and all, are gone. Needless, therefore, to enlarge upon the further fact that so far as the West Indies are concerned their glory also long has faded. With the abolition of the slave trade on the one hand, and the development of the American Southern States and of the vast Eastern trade on the other, the importance of the West India trade has greatly paled. Lima, Mexico, and Manila, too—names the bare mention of which seems to evoke from the mists of the past the gleam of gold and silver and the flash of gems-have settled down amongst the have-beens. Gold and diamonds now come from sources formerly unthought of: from South Africa, from Australasia, and from the Great North-West — British possessions all; and in British ships. Truly, when we reflect upon it, the former things have greatly passed away.

ANNULMENT OF THE NAVIGATION LAWS.

I say "Laws," generally, because it is evident that though our Act of 1651 was far-reaching and compelling, the other Powers had laws which either we adopted as our model in 1651 or which they later copied from our statutes. When or why the other States repealed their Acts, so far as they have repealed them, matters little; the point is that they have mostly gone. Our own Act went in 1849, and a prodigious stir there was about it. It was the time of the Free Trade movement. Shipowners and shipbuilders were wild with indignation at the outrageousness of the proposal. Three-fourths of the male population of Liverpool-47,000 signatories-petitioned Parliament against it. The Times, however, was dead against them. Lord Carlisle, in the House of Lords—he had evidently been reading Adam Smith—declared that to the Navigation Laws we owed two protracted and sanguinary wars. Ultimately—in 1849—the 1651 Act was repealed, and in 1854 our coasting trade was similarly declared open. Practically nothing now remains of the great European system which in our former wars played so important a part in enhancing the value and extent of our right to make prize at sea. In early days the struggle was for the lands across the sea, and we eventually secured them. In the struggles of the future these possessions will remain, as in the past, with the Power supreme at sea. But, as it stands, no nation or coalition of nations is likely even to think of annexing our colonies so long as we shall retain command of the seas. From which it seems to follow as an inevitable corollary that so long as we retain such command the colonial wars of former times can never be revived.

COASTAL TRADE: COASTAL BLOCKADE.

I have already remarked that the enemy's domestic trade was * formerly dependent on the coastwise traffic, and that to create for him a maximum of discomfort we resorted largely to blockades, which incidentally brought us a good many prizes. To-day, in peace, coastal traffic is conducted on a scale of vast magnitude, because of the convenience, and especially of the cheapness, of the method; no carriage so cheap as sea-carriage. The outbreak of war to-day would summarily stop the coastal traffic of the navally weaker of two belligerents, and would more or less seriously affect that of the The risk of capture and its attendant costliness would stronger. turn the scale in favour of inland communications-inland communications which in ancient times were non-existent. Since those times, railways have been introduced and so developed as to link together city, town, and port, whilst inland water-ways have on the Continent been created and developed to an extent of which most Englishmen have no conception. Even if it were possible for us to close absolutely our adversary's ports, his trade would go on with little interruption. His ships he will be able, or indeed compelled, to lay up in port. Of course, the inland traffic will be costly; but in old days traffic had perforce to be kept up coastwise, no matter what the risks of capture. To-day France can supply herself through Belgium; Germany, through Holland and Belgium; Holland, through Belgium and Germany; Russia, through Germany and the Low Countries. What occurred, even in 1854, when inland communications were insignificant compared with what they are this half a century later? In August, 1854, Mr. Cobden, as I gather, had been painting gloomy pictures of what would happen to certain of our industries as the result of stoppage of the Russian trade. But what Said the Manchester Guardian of that date: - "Our view was that with all the modern appliances of internal traffic which now cover the face of Europe, with the new systems of canals, internal river navigation by steam, and above all with the railways which, after covering Belgium, Germany, Austria, and France, have thrust forward into Russia, it would be impossible for any state of things which could arise to deprive us of anything that Russia could give and which we required. Now to the proof. The Russian ports in the north have been blockaded since last November. For some months they were ice-bound. Before the ice cleared away the English fleet took its place as sentinel to prevent the escape of a single ship. notwithstanding all this, the official accounts of the export of tallow over the land frontier show that 26,000 casks had been exported in the present year against 27,600 last year, a difference which is quite immaterial. Through the other Baltic ports our supplies promise to be quite adequate to our wants." On the 23rd December, 1854, the *Times*, in a leading article, said:—"The Allies are not compelled at present to exact from the King of Prussia so great a sacrifice (e.g., joining in the war), but they may in justice require that he may cease to allow a trade to be carried on through the Prussian ports, which is one of the principal means of sustaining the resources of the enemy. We may in a word require of Prussia as the first proof of her desire to regain her position in the councils of Europe, that she hermetically seal the Russian land frontier to the transit trade." Evidently, from contemporary writings, the discovery of the ineffectiveness of mari-

time blockade, owing to development of inland communications, had come upon us with astonishment and disgust. We had failed to recognise that the things of our former wars had passed away. The days for coastal blockade, in the case of European States, with any thought of starving out the enemy, or with any idea of making prizes of his coastal traffic, have gone for ever. Islands we can blockade, as the United States blockaded Porto Rico, or fortresses we can blockade which are also invested by land, as Japan blockaded Port Arthur; but seaboard which has inland communications at the back of it can, with the object of old days, no longer be blockaded. immense possibilities of railway communication, even with only a single line, and that some 8,000 miles in length, are eloquently testified by Manchurian experiences. And the practicability even of blockade itself, on anything like the old lines seems very doubtful. In these days of long-range shore guns, of swift torpedo-boats, of floating mines, and of possibly deadly submarines, blockades may have to be carried on at such a distance from the territory blockaded that to make the blockade effective a greater force will be necessary than can be spared for the purpose. Mr. Pretyman, when recently introducing the Naval Estimates, remarked that "the use of the submarine extends the range of the defence far beyond the guns of the forts defending any harbour"; while we are further told that the radius of action of submarines now approaching completion in this country is no less than 500 miles; and probably the same will be pretty much the case as regards the submarines of other countries. But, changes in the conditions as affecting blockade apart, it is obvious that the altered conditions of inland traffic have greatly modified, even if they have not annihilated, the enemy's former necessity for coastal traffic. And in like manner they seem calculated to affect his traffic overseas.

INLAND COMMUNICATIONS: THE ENEMY'S OVERSEAS TRADE.

With our knowledge of the potentialities of inland communications, as in course of the past century gradually evolved, let us imagine ourselves at war with Continental Power A, Powers B, C, and D remaining neutral. Power A knows that any of the national merchant-ships sailing out or home will be liable to be captured and condemned. What happens? A's shipowners will lay up their ships, and the national trade will be carried on under the neutral Goods neutral-owned will be taken direct to or from the belligerent non-blockaded ports, the rest will be shipped to or from the nearest port of neutral Powers B, C, or D. It will plainly be cheaper for the enemy to trade through the neighbouring neutral ports than, with the heavy burden of war premiums on ship and cargo, and war freights, to trade direct, in It is reasonable to believe happened in 1854, with the scanty inland communications then available, will repeat itself on a very large scale under the conditions which will prevail when next we are at war. For trade will and must always follow the cheapest channel, and with the risk of capture active in even a moderate degree, neutral ships and neutral ports, with inland communications to the belligerent centres, will cut out by reason of greater cheapness, direct trade saddled with the burdens incidental to risk of capture. I will refer to the Declaration of Paris presently, but meantime the following quotation from a speech of

Lord Salisbury in 1871 will not be out of place:—"We are too apt," said his lordship, "to be misled by the great things the fleet did during the great Revolutionary War. . . . I believe that since the Declaration of Paris the fleet, valuable as it is for preventing an invasion of these shores, is almost valueless for any other purpose."

Conditions having also changed as regards sailing under convoy, the obligations of prize crews, and the necessity for, or propriety of independent cruising, let me briefly refer to these considerations, even though, perhaps, no great importance attaches to them.

ANTIQUATION OF CONVOY SYSTEM.

It is a common notion that it was the condition of war which created the system of sailing in fleets shepherded by men-of-war. The armed convoys were, of course, the product of ocean warfare, but the protection was largely evolved to meet the needs of conditions long From the earliest days it was the mercantile habit to put to sea in fleets. Let me go back to the ages for an illustration. will not apologise for the quotation, for the words are a poem in themselves:- "And king Solomon made a navy of ships in Eziongeber, which is beside Eloth, on the shore of the Red sea, in the land of Edom. And Hiram sent in the navy his servants, shipmen that had knowledge of the sea, with the servants of Solomon. And they came to Ophir, and fetched from thence gold, four hundred and twenty talents, and brought it to king Solomon." And ever since, till old conditions came to an end, ships sailed in fleets or company. Says De Foe, in "Robinson Crusoe," in 1719: "The Brasil ships come all in fleets," and he might have said the same of many other trades. Often the ships and their cargoes were of one ownership, or the trade was a monopoly. When war occurred, the State provided them with armed protection, and the system was extended to the point that outgoing ships were obliged to sail for a safe rendezvous, there to join the fleet of merchantmen waiting to be convoyed beyond the danger zone. The Act 6 Anne, cap. 13 (1707), provided that 43 ships of war should be told off to act as convoys in proper stations. In 1803 was passed a Statute of 18 Sections (43 Geo. III., cap. 57), with stringent regulations for the convoy of ships during the war with France. In 1872 this legislation was "scrapped" with a lot of other legislative lumber which time and altered conditions had rendered obsolete and useless. The Naval Prize Act and the Naval Discipline Act provide punishment for breach of convoy obligations; but so far as I know there have been since the repeal in 1872 no laws or regulations on the subject. whole thing is dead as the Act of 6 Anne. Said Sir John Colomb, M.P., in the course of an address delivered in the city in 1902:-"The primary business of our war fleet is to destroy, capture, or contain in ports, the enemy's war-ships. Until this is done, all thought of applying the Navy to the direct protection of commerce must be abandoned." And can anybody doubt, by the light of modern experiences and views of naval strategy, the soundness of this view? Altered conditions have thrown on Time's high-piled scrap-heap both the sailing of ships in fleets and the occasion for convoy. With privileged trades no longer existent, and with sailingships and steamers—these last a purely modern creation—and neutral

vessels generally in free competition with those of belligerents, how is it possible that any system of convoy can be evolved which would be approved by shipowners? To make swift steamers keep down their pace to that of 9 or 10-knot tramps; or, still more, to make steamers of both sorts adopt the speed-or slowness-and follow the track of sailing-vessels; or to make sailing-vessels bear up for the steamers' coaling ports, would be alike impracticable. Equally impracticable to provide all three classes of traders with separate convoy. Fast steamers would probably lose more by demurrage than they would save in insurance premium. The late Vice-Admiral Colomb, in an interesting and valuable address already referred to, dealt especially with the subject of convoy; but neither he nor those who subsequently took part in the discussion seem to have recognised how greatly the old conditions have been altered by the repeal of our Navigation Acts. In the old days our trade was strictly closed to neutral vessels; there "Having no rivals who was no neutral competition to consider. could step in and take the carrying trade out of their hands," said the lecturer, "British shipowners, merchants, and underwriters accepted the leisurely and closely ordered methods by which the Government thought fit to conduct the carrying trade of the country." Admiral Colomb recognised, as a retrospective explanation, the conditions which formerly made the convoy system acceptable to the shipping community, but he failed, I think, to recognise how greatly the alteration of these conditions will militate against any renewal or revival of it. With neutrals free-under the Declaration of Paris, doubly free-to engage in our trade, and therefore to compete keenly with our shipowners, our merchants will not employ, if they can possibly help it, vessels tied to a tardy convoy system. I agree with the late admiral, that the convoy system will not be impossible of revival; but I also agree with him that, unless shipowners cry out for it, it will not be revived. And I feel pretty confident that the conflicting interests of owners of fast steamers, of slow steamers, and of sailing vessels, together with the fact that neutral vessels not under convoy will certainly be preferred to any of them, will be fatal to any hope or thought of an agreement of the shipping community The conditions of our to petition for revival of the convoy system. commerce, too, have so greatly changed that I agree with the late admiral in his definite conclusion that "it is a human impossibility to put that commerce, without paralysing it, into a position applicable to the condition of naval convoy." That the declaration of naval war would be, as he says, "the signal for the abrupt cessation of the sailing trade all over the world," I am, however, less confident. It seems to me, indeed at least possible that the cost of coal and the difficulties of replenishing, together with the greater safety of the long-sea route to and from the East and Australasia, might temporarily create for the owners of sailing tonnage a demand to which they have long been strangers.

CAPTURE AND ADJUDICATION, TO-DAY.

In the old days, as already mentioned, prizes might be carried into the nearest safe or trustworthy neutral port, and there allowed to remain while their case was being adjudicated in the prize court of the captors. On condemnation they could be sold in a neutral port. It is hardly necessary to point out that under the obligations of

neutrality as now understood, no neutral State will be likely to assent to such a belligerent misuse of its hospitality. Prizes must be taken, at whatever inconvenience, within the territorial jurisdiction of the captors. To what extent, in the conditions of modern scientific fighting, with every man a valuable and highly trained unit, we shall be able to spare crews for the manning of prizes I make no attempt to say.

INDEPENDENT CRUISING, TO-DAY.

The history of our prize-making in the past is largely the history of independent cruising. Without independent cruising our prizes would have been comparatively few. We have already reviewed the circumstances in which such cruising was formerly a necessity. These circumstances have now so greatly changed as to support the opinion that independent cruising should be regarded as obsoleteat any rate, at the outset of war. Later it may be found possible to spare vessels for the patrol of trade routes, though here again unless the enemy shall be dissipating his forces for independent cruising, independent cruisers apparently will not be called for by our-The modern scientific conception of naval warfare is to assemble your forces, to give them the strength of combination, to seek out the enemy wherever he may be, and to use the mighty warengine thus created as a war-hammer against his fleet and forts. This was the main object of America in her recent war with Spain, and it has equally been the tactics of Japan. And I apprehend that it will be ours. When victory has been gained upon the seas, cruisers may be detached in search of prize; but so far as we are concerned, if I rightly read the logic of altered conditions, the game will hardly pay the candle. In the Franco-Prussian war, the total captures of the French were, according to information which I have received from a trustworthy source in Paris, 80 vessels—not 2 per cent. of the total German shipping. In the Spanish-American War the American captures were but few; perhaps a score. The Japanese have captured, it would seem, very few Russian merchantmen-presumably most, if not all of them, near the Japanese naval base. True, the Russian merchant fleet is small; but if it had been large, does anyone suppose that Japan would have ever given it a serious thought? I think Japan would say that, in times of national danger, she has something better to do with her mighty ships and patriotic and glory-seeking sons than to set them to scour the seas for the enemy's trading vessels. And I shall not be surprised if, when war comes upon us, this is what we shall say ourselves.

Before concluding with a reference to the important new conditions which have arisen; let us briefly recall the alterations in the old.

THE CHANGES IN THE OLD CONDITIONS SUMMARISED.

First, then, the trade which used to be the object of our attack has almost entirely become our own. The foreign possessions, at one time perpetually the sport of war, have become either ours or independent, with, in the latter case, their trade mainly carried on by us. In the very few and unimportant cases where the possessions remain with their former European proprietors, the abolition of the Colonial System has thrown the trade open, and therefore also largely into our

hands. The coasting trade of Europe, on which in times of war we used to place a heavy toll, will, on the outbreak of war, pass into the hands of the inland traffic systems, or alternatively to neutral carriers, the national coasters being superseded. As the enemy will be able to trade through neighbouring neutral ports, it will be useless, with any thought of making prize, to blockade his coast; and the vessels which formerly became our prize for attempting the blockade will no longer swell our captures. For trade must follow the cheapest channel, and if it can be more cheaply carried on through neutral ports and by inland conveyances than in the national vessels, burdened with war premiums and freights, the national vessels will be run or taken off the road. No system of convoy would affect the result, and in any case the convoy system must be looked upon as dead. Prizes which were once ours if we could get them to a neutral port have now to be brought direct to British jurisdiction. And whereas the former conditions were such as to involve the sending out of independent cruisers broadcast, with the result of prizes made galore, on the one hand the conditions now prevailing will make small demand for such a use of war-ships, while on the other the modern view of naval force insists on concentration. You will see, then, how greatly the former things have passed away. And we have conditions altogether new, of such a nature as still more to whittle down the chance of prize. First of these is the prompt intelligence of war.

CONDITIONS NEW: TELEGRAPHIC NEWS OF WAR.

In the old days ships loaded at and sailed from distant ports long after war had broken out, they having themselves no news of it. We captured all we could, and those which came into our ports in ignorance sailed into the lion's mouth, which promptly closed upon them. To-day the electric cable enfolds the world in all directions; a shipowner can communicate with the ship's agents wherever the ship may be, or be expected. The outbreak of war and the holding-up of the enemy's vessels by their owners will be simultaneous. Vessels on the high seas will be at risk, but very many even of these will learn the news from passing vessels or at an early coaling port, and will cable to their owners for instructions. Vice-Admiral Colomb, in his "Naval Warfare," states that "Prussia in 1870 prohibited her merchant vessels all over the world from putting to sea lest they should fall into the hands of France." We have already seen how short was the list of the Frenchmen's prizes. In the Times of 19th July, 1870, it was stated that about 100 North German vessels were detained in the north-east ports of Great Britain, and that none of them were likely to leave until the termination of hostilities unless sold to neutrals. I need not enlarge upon the subject. It must be obvious to all that in the future the electric cable will save from risk of seizure many ships which in former days would have sailed unsuspectingly into the capture zone. Moreover, in the case of enemy vessels bound to or from our own ports when war breaks out, a special grace will almost certainly be given to them.

DAYS OF GRACE.

Professor Lawrence in his recently published work well expresses the shortness of the shrift given to "the enemy within our gates" in

early days. "Until about a century ago," he says, "the custom obtained of levying, in anticipation of hostilities, an embargo on vessels of the prospective enemy. That is to say, his merchantmen lying in the ports of the State which contemplated a rupture were detained in order that there might be a rich harvest of prizes as soon as the expected war broke out." In such a case we snapped up It sounds to-day like an outrage on the laws of everything. hospitality, but in earlier days the view was different. And a fortiori we seized enemy property arriving in our ports after war had broken out. In 1665, in order to remove what were referred to as the doubts due to "the long intermission of any war at sea, it was publicly declared that all vessels belonging to enemies coming into any port of the realm were forfeit to the Lord High Admiral. The doubts referred to were not as to the propriety of seizure, but as to the parties entitled to the property seized. But all this has been altered since 1854. On declaring war against Russia we allowed six weeks to Russian vessels in our ports to depart in safety. Later, thirty additional days to the enemy's vessels in our Indian or Colonial waters, while all Russian vessels on the way to British ports were to be free from capture. In every war since then this notable example has more or less been followed. In the Franco-Prussian war of 1870, in the Græco-Turkish war of 1897, in the Spanish-American war of 1898, in the Russo-Japanese war now in progress. The United States not only allowed to Spanish vessels in American ports until the 21st May-viz., 30 days-to depart in peace, but exempted from capture all vessels which had left American ports or had sailed for American ports previous to the 21st April. The unbroken experience of half a century forbids us to doubt that in all future wars we shall allow enemy's ships sailing to any of our ports to complete their voyage and depart in safety; with similar grace to vessels loading or discharging in our ports. If, in the same spirit of honouring or justifying a universal credit of British good faith and hospitality we should similarly give grace to the enemy's vessels at or bound to our coaling ports, the possibility of captures on the outbreak of war will thus be still further dimished.

THE DECLARATION OF PARIS.

The Declaration enunciated two new principles of the first importance, briefly known as the Rules of:—

- 1. No Privateering; and
- 2. Free Ships, Free Goods.

Before reviewing these important pronouncements of international law—or treaty—, let us shortly consider the preliminary question often asked: What is the certainty or probability of the future observance of the Declaration? In this consideration there are three highly important factors to be borne in mind, viz.:—

- That the principles laid down are in harmony with modern ideas of civilisation and enlightenment;
- 2. That all the world has expressed accord with them; and
- That since their formulation, half a century ago, they have stood unquestioned.

It must be admitted that these facts provide strong argument in favour of the permanence of the Declaration. The only two Powers which have not formally ratified it by their signature are the United States and Spain. In their recent war, however, the United States announced the intention to adhere to its conditions, while Spain declared the conclusion of the Government that "the fact of not having adhered to the Declaration did not exempt Spain from the duty of respecting the principles which it enunciated." The right to commission privateers was reserved by Spain; but, as we know, a proposal to resort to privateering was never seriously discussed. In dealing with the two rules separately I will submit special reasons for believing in the continuity, the permanence, of the Declaration; but meantime I submit that the three considerations just mentioned afford ample ground for believing that no Power is likely to incur the odium, even if willing to encounter the possible risks, of going counter to principles which are humane and reasonable in themselves, and on which the whole world has set the seal of approval. Let us take these rules or principles in order.

ABANDONMENT OF PRIVATEERING.

I have already mentioned that in their recent war, neither Spain nor the United States, both of them being free to do so if they had pleased, resorted to privateering. It is a barbarous right, and if both the United States and Spain had used it, grievous injury would have resulted to both. Whether the reluctance of both Powers to resort, in the face of while private to an electric and discording weapon or the sense. public opinion, to an obsolete and discredited weapon, or the sense of each of its two-edgedness, or a doubt as to the practicability of employing privateers, which sooner or later would have to try conclusions with a modern ship of war; whether, I say, it was any one or all three of these considerations which decided the combatants, the fact remains that, neither Power being a signatory to the Declaration of Paris, both abstained from resort to privateering. tion has greatly advanced, no doubt, and also an increased sense of its obligations. But it is not only civilisation which has advanced, naval science has advanced still more, and in my opinion the fact is fatal to privateering. In the old days of wooden sailing-vessels, the difference between ships of war and merchantmen was largely one of equipment. We have already seen how Pepys borrowed merchantmen for the public service. And when in 1804 the gallant Dance with his merchant fleet put to flight the armed squadron of Admiral Linois, the fact was largely due to the French admiral's mistaking the big Indiamen for ships of war, thereby, as Mahan remarks, "making himself for a brief period the laughing stock of both hemispheres." In those days smooth-bore guns were used, battles even between war-ships were fought at close quarters, and boarding was the ordinary conclusion of the fight. There was, in those days, in build and armament, no vital distinction between ship of war and privateer, and not infrequently the privateer proved herself as good as the war-ship. In 1780, for example, the Liverpool privateer "Vengeance" surrendered to two French frigates only after fighting them both for two hours. Nowadays the fighting ship is heavily armoured, and, besides the deadly torpedo, carries guns throwing shells of tremendously explosive force; and one well-aimed shot from

a distance of several miles would wreck the best-built merchant-ship And the crew of a privateer could hardly count on much sympathy if they were allowed to share the fate of the ship. opportunities of making prize would have to be great indeed to induce either speculators to expose their property, or officers and crews to risk their lives in such a venture. And if my conclusions, to be presently set forth, are generally correct, I think it will be recognised that these opportunities will be greatly lessened. For the former things, in privateering also, have passed away. And I think it will be recognised by future reviewers of the history of maritime warfare, that the sinking of the "Alabama" by the "Kearsarge" in 1864 set once for all a seal upon the fact. You will remember in 1864 set once for all a seal upon the fact. that the Alabama was specially built for the Confederate States to make war on Federal commerce, and that she was sunk by the shot of the "Kearsarge," which vessel had been protected by being wrapped over her vitals in a 6-foot belt of chain-cable, planked over. a modern war-ship with her defensive armour, powerful rifled ordnance and torpedoes, the unprotected private ship of war would not keep If any doubt be entertained as to afloat for a quarter of an hour. the maintenance of Rule I. of the Declaration of Paris, it will, I think, not survive an impartial consideration of the fearful risksporcelain against pot-which will now await the privateer.

Lest it should be supposed that I have overlooked the point, let me remark that subsidised or other large and costly merchant vessels placed under the State flag and commission will be public vessels and not privateers. Any such vessels, are, however, much more likely to be used for transport or for coaling and equipment purposes, under naval protection, than employed as privateers. But if so employed, their structural defences will remain those of a merchant vessel, with

all its warlike imperfections.

Let us now consider the second in order, but, in point of its immense importance, the first and greatest of the Declaration clauses.

FREE SHIPS, FREE GOODS.

The effect of the No Privateering clause in the Declaration is to relieve the enemy's property from capture by other than a public or national vessel. The effect of the Free Ships, Free Goods clause is to relieve altogether from capture all (innocent) property of the enemy carried under the neutral flag-a change of transcendental importance. You will remember that we noticed under the head "Enemy Goods Ships " Neutral that this principle is concession. both to belligerents and neutrals, which has in past frequently been the subject of international that 80 strong and general was the favour of it that a century ago we had to face an armed Coalition formed to maintain it in the teeth of our relentless opposition. But in 1854, on declaring war against Russia, without, so far as I know, one word of explanation, we announced our intention not to seize Russian property under the neutral flag. And not only this, but on conclusion of the war we invited all the world to join us in signing at Paris an international treaty or declaration in the same general sense. In the matter of civilised enlightenment the treaty was, as all must admit, a forward step. All the nations except ourselves had for two centuries contended for the Free Ships, Free Goods

principle, and with the single exceptions of the United States and Spain all have now pledged themselves to its observance. The United States, though they have not signed the treaty, are strongly desirous to go further; to grant immunity to innocent private property without exception. As to the "Free Ships" principle, so far back as 1796 they had publicly declared approval of it. In their recent war both the United States and Spain voluntarily decided to respect the principles of the Paris treaty. Let it be borne in mind that it was always Great Britain-I think I may say, Great Britain only-which had stood out for the ancient right. Well, in 1856 Great Britain said, in effect, "We abandon, once for all, our old contention: we will give the world, if the world pleases to sign agreement, what the world has so long contended for." And practically all the world agreed. Why then should it be doubted that this provision of the Declaration, long so ardently desired by all the world, will any the less hold good in future wars than it held good in the Franco-Prussian war, the Spanish-American war, and the Russo-Japanese war? And, indeed, it is difficult to imagine any foreign nation, plunged into the horrors and uncertainties of war, willing to add to its difficulties by needlessly exasperating neutrals, who would bitterly resent interference with their ships on the ground that they were carrying-not contraband; a subject outside the scope of my paper; but—merely enemy goods. There is amongst neutral Powers to-day a solidarity not to be ignored, and no belligerent is likely to be willing to affront the amour-propre of neutrals. You will remember how, in the late Boer war, we paid compensation to the owners of the German mail steamers which we detained and searched for contraband. apparently under no liability to pay anything at all, and imagine that our only reason for giving compensation was our desire to remove any occasion for neutral anger and dislike. For all these reasons, then, the supposition that any foreign belligerent Power will set at naught the Free Ships, Free Goods rule seems quite unreasonable. There remains Great Britain. It may be that we acted hastily and improvidently in signing the treaty at all; but sign it we did. It was we, indeed, who engineered it; at any rate it would never have seen the light unless we had approved it; and the national honour is pledged to it. No doubt we can withdraw from it while peace prevails, but we have never intimated the least intention or desire to do so. To withdraw from it suddenly in war or on the imminence of war at our own initiative seems to me, if the national good faith is to be considered, a thing impossible. Our prominent part in promoting the Declaration, our no less prominence in the advance of civilised enlightenment, and the unquestioned fact that all the world approves the principle which we voluntarily went out of our way to ratify, alike forbid the supposition that in this important matter Great Britain will ever be reactionary.

WHAT IS LEFT FOR US TO CAPTURE?

If you ask me what, then, under the conditions as I have sketched them, remains for us to capture, I can but answer, "Very little." Other considerations apart, how can one reflect on the Free Ships, Free Goods clause of the Declaration of Paris, on the development of inland traffic, on the world-wide availability of the electric cable,

on the modern and honourable rule of Days of Grace; how, I ask, can any reasonable and unbiassed intelligence reflect on the scope and effect of these great changes without recognising that what remains for us to capture must needs be very little? Such of the enemy's domestic trade as may be left to coastal carriage will, on the inexorable law of the cheapest, be carried on in neutral bottoms. For precisely the same compelling reason, his overseas traffic will similarly be entrusted to neutral carriers. This being so, needless to enlarge upon the fact that our possession of or command over the coaling stations will of itself close the distant seas to the enemy's steam shipping. Nothing will remain for us to capture but his vessels caught unprepared at sea when war breaks out. These the rule of days of grace and the telegraphic cable will reduce to few. And when these few have been snapped up or have managed to get safely into some neutral port or national port of the enemy, nothing will remain. France in 1870 captured, I am informed, only 80 German vessels, the United States in 1898 only, so far as I can ascertain, about a score of Spanish vessels. The captures of the other's vessels by Russia and Japan in their present war have been very few. I cannot affirm it as a fact, but I have reason to believe that, just as the Spanish vessels captured by the United States were mostly snapped up at the outbreak of the war, so the German vessels captured by the French were similarly seized. Belligerents find it vastly cheaper to lay up their own vessels and to trade under the neutral flag. Wherefore—and let it be well remembered—the Declaration of Paris is, so far as its principal clause is concerned, a "Declaration of Transfer of Belligerent Trade to Neutral Flags."

THE CONSEQUENCES TO BRITISH TRADE AND SHIPPING.

The consequences of the transfer of belligerent trade to neutral vessels may be for us, as belligerents, most serious. We have seen how the enemy, under pressure of war charges, will have to lay up his ships and let neutrals do his trade for him. Such a course may matter little to a nation having but a small carrying trade. To us, as the Pickfords of the sea, it may prove to be most serious. You may say that no nation is strong enough at sea to produce on us any such effect. I do not know how this may be; but we may find in the future, as we have found in the past, not merely a nation but a coalition of nations to oppose us. At any rate, we have no right to assume the best that can happen. But it by no means follows that because our naval strength is immensely superior to that of our adversary the fact of hostilities will not seriously hit our merchant shipping and our trade. The moment we go to war, underwriters will begin to charge war premiums, and these, in view of possible extensions of the war, may, and probably will, be a good deal heavier than the facts may seem to justify. Naval reservists will be called from our merchant-ships; many of their crews will join the forces; and of the many foreign seamen in our employ not a few will leave our Service. The demand for crews will greatly send up wages, and war premiums and heavy wages will necessitate high rates of freight. In addition, British merchants will have to pay heavy war premiums on their goods, while neutral shippers by our vessels will also have to pay stiffly for insurance, for the capture of the ship will involve heavy

charges on the cargo. The inexorable law of the cheapest seems destined to lay up our ships and cause the transfer of our trade to If the result should include the steamers which carry our mails and passengers, the consequences to the Empire will be calamitous, for, in a sense, communications are more important than trade itself, for trade is dependent on them. I grant the possibility that there may not be sufficient neutral ships for trade at large, and that the rate of freight by them may be in consequence forced to a point at which our ships will be able to compete; but in any case, the necessary preference to neutral carriers will hit our shipping hard. Many of our ships will be laid up, and probably many will be sold to neutrals-an alternative less disastrous for their owners than the loss and deterioration otherwise to be faced. If such sales should take place to any considerable extent, the neutral tonnage will be proportionately increased. Neutrals will more or less get possession of our trade, a good deal of which we hold now by but a slender thread, and it does not follow that we shall eventually recover it. Anyone conversant with shipping will confirm me when I say that a very small difference between freights will give the trade to the cheaper, though possibly less desirable vessel; and in case of war, belligerent vessels, burdened with war premiums and war freights, will be put out of the running. Perhaps you may think that I am unduly pessimistic. Let me, then, quote the views of some great Englishmen in the past. You will find their speeches at more length in Mr. Gibson Bowles's book, "The Declaration of Paris." Richard Cobden asked in 1856: "Have you ever thought of the effects that would be produced on English shipping property in case of a war with any maritime Power? All our carrying trade would, of course, be in the hands of neutrals. Who would carry goods in an English bottom and pay 20 per cent. against capture when ships under other flags would sail without any such burden?" Sir Stafford Northcote, in 1862:- "Neutral vessels would now be the safest in the event of war, and the effect of war would infallibly be to throw out of employment a large amount of British shipping, which would be bought up and pass over to other nations." Mr. John Bright, referring in 1862 to the possibility of our being at war with another country, said: - "We should have the mercantile navy of both countries shut up, to the absolute ruin, for a time and permanency, of some of the shipowners of both countries." Mr. Disraeli, in the same year, said that the effect of our acknowledgment of the new principle "must divert the commerce of the country in time of war into neutral bottoms." As a practical comment on this view, let me here quote from the late Admiral Colomb's lecture of 1887. He said that in the four years of the Civil War between the Northern and Southern States 715 American ships were transferred to the British flag, and in the first three years of the war about 38 per cent. of the carrying trade of New York disappeared. 715 ships. The grand total of the prizes made by both adversaries in the Civil War between the Northern and the Confederate States, in the Franco-Prussian War, in the Spanish-American war, and in (to date) the Russo-Japanese war fell far, very far, short of this loss. True, the Northern owners were paid for their ships transferred; but I ask you to consider what the loss meant then and has meant since to the earning power of the United States as a trading nation. It has, I know, been said that the United States lost their

trade owing to the introduction of iron ships, with which they were unable to provide themselves. Perhaps there is a modicum of truth — only a modicum, I think — In this explanation; but, be the explanation what it may, the United States lost 715 of their ships by transfer to neutrals. Supposing that we, as the result of a maritime war, should suffer even half such a loss, what do you imagine should be our fair equivalent in captures, over and above our own losses by capture, to set against it? Said John Stuart Mill in 1867 :- "If our cargoes would be safe in neutral bottoms but unsafe in our own, then, if the war was of any duration, our whole export and import trade would pass to the neutral flags; most of our merchant shipping would be thrown out of employment and would be sold to neutral countries, as happened to so much of the shipping of the United States from the pressure of two or three, it might almost be said, of a single cruiser. A protracted war on such terms must end in national disaster."

End in national disaster." I feel almost culpable, in compressing into a few lines at the conclusion of a long lecture, a reference to contingencies so grave. My explanation must be that the subject of my lecture is the taking of enemy property, as such, by our Navy, and not the dire effects of modern conditions on our shipowners. Still, the two subjects are so bound up together that I felt compelled to make some reference, however brief and inadequate, to the danger which threatens us. For it is as great at this moment as at the time when Cobden and Bright, Disraeli, Mill, and Stafford Northcote so strongly emphasised it. The slender hair of peace has safely suspended, for half a century, the sword which threatens us; but, sooner or later, this slender hair must snap. It will be too late then to cry aloud at the short-sightedness which hung disaster over us; futile to inquire whether

Liberals or Conservatives have been most to blame.

Even if, as regards the possibilities of prize, you are not prepared, without more study of the subject, to accept all my conclusions on the great changes which have taken place, you will, I think, recognise at any rate that, in the matter of captures from the enemy, the attractive possibilities of former days have passed away; but if they be double, if they be ten times as great as I have represented them, I still submit that any consideration of our ability to make prize sinks into nothingness in comparison with the danger to which the Free Ships, Free Goods clause exposes our shipowners and our trade. It would be interesting to know whether the consideration of this matter is within the province of the Committee of Imperial Defence, and, if not, to whom the nation should look for its consideration. In giving evidence last year before the Royal Commission on the Supply of Food and Raw Materials during War, I dealt with this subject, and, in conjunction with a scheme of national indemnity or insurance, I advocated one or two methods by which this danger might at any rate be mitigated. I doubt, however, whether such considerations were within the scope of the Commission's reference. We are an optimistic or an apathetic race; the charge of meeting our prospective troubles half-way we avoid by ignoring them-greatly sometimes to our eventual cost and sorrow. What I want to bring home to all of us is that if in this matter we elect to leave ourselves indefinitely in the hands of fortune, fortune may treat us as our

improvidence deserves. We may find some day our shipowners, incapacitated by war charges, helpless spectators of a neutral competition impossible to resist; find that, whilst a few of the enemy's merchantmen are being captured by our ships of war, our great national carrying trade is being bled to death by neutrals.

The Rev. T. J. LAWRENCE, M.A. LL.D. (Lecturer on Maritime Law at the Royal Naval College, Greenwich) :- I think, Sir, I may express the debt of gratitude felt by the whole meeting, to the lecturer for the most important paper he has just read to us. The historical and legal research that it contains, and the perception of the effect of the changed conditions of warfare on commerce, are most valuable. As he has said at the end of his paper, we are apt to go on in the old way without noticing that the world is changing round us and without adapting ourselves to the new conditions. On the whole, I absolutely agree with his conclusions. These changed conditions have so altered warfare that the old prize rules are no longer applicable in many instances, and therefore it seems to me, as it does to him, perfectly clear that we shall not be able to make prizes from any possible enemies as we did in the old days. I would go very much further, and say, that as things stand at present, we run the risk of dangers that were comparatively small a hundred years ago. With regard to the Declaration of Paris, we must look facts in the face, and even if we wished, I do not think we could go back from that Declaration. Morally, we are bound by it. We have prospered enormously as neutrals under it. Through it we have largely obtained that great share of the carrying trade of the world that we enjoy at Then we have to remember that sea-borne commerce the present day. has greatly increased, that nation after nation has given itself to the development of its trade, and that no neutral nation of any powerand certainly no group of neutral nations of any power-will consent that we or any other maritime State should tear up that Declaration. is all very well to say that we can fight a Power or any combination of Powers; but when we are engaged in a life or death struggle with one or two great naval rivals, we cannot in common prudence afford to bring down upon our backs in our time of need any revival of the ancient armed neutralities. And in these days, when great and powerful Emperors go to small States, and pay special visits in order to develop a commerce that is exceedingly minute, can we believe that when a very great commerce is threatened such rulers would stand supine, while we tore up the Declaration, and resumed our old right of seizing enemy's property, even under a neutral flag? I do not think for a moment But there are one or two points of detail it is in any way possible. on which I do not feel in exact agreement with our lecturer, and I am sure he will excuse me if I refer to some of them. It seems to me that the great increase in sea-borne commerce does, to some extent, counteract the influence of the changes which have given us the possessions whose trade we used to attack in the old days, when they belonged to one or There is much more freightage at sea than there other of our enemies. used to be a hundred years ago, and consequently we might find something to pick up even under present conditions. Many States still keep the coasting trade in their own hands. Supposing, in the event of being at war with us, they threw it open to neutrals-certainly, if they only threw it open for the war-I fancy our Prize Courts would at once apply an old rule, and deem the neutral vessels engaged in that coasting trade under special licence from the enemy as being the enemy's

transports, and capture them accordingly. Not long ago, I was talking to a distinguished naval officer, who had just returned from the Far East, and he told me that when the Japanese, at the beginning of the war, opened their coasting trade to neutral vessels, and gave licence to a good many British ships to engage in it, those British ships clearly understood that they were rendering themselves liable to Russian capture; and that when Admiral Jessen made some of his famous raids from Vladivostok, those ships of ours discreetly kept in harbour until the Vladivostok Squadron had returned. That shows there is the possibility of picking up a few unconsidered trifles in the way of vessels engaged in the enemy's coasting trade. As to the question of blockade, I agree entirely with the lecturer that the palmy days of blockade are over, partly because the changed conditions of warfare make it, I will not say impossible, but only possible under comparatively rare circumstances, and partly because, as the paper we have just listened to says, when you blockade, not for the reduction of the place, but in order to cut off its trade, you get very little by it. The game is not worth the candle if the blockading Power has land means of communication. But, of course, it has not always land means of communication. Forty or more years ago, we saw the immense effect of the blockade of the ports of the Southern Confederacy, which marched by land with the North, its enemy, for the time being, and towards the South with Mexico a very undeveloped State at that time. There was very little land communication possible, and to cut off its sea-borne trade meant its gradual bleeding to death by commercial inanition. Not long ago, when we, with Germany, blockaded that extremely truculent little State, Venezuela, I believe the And when somewhere about screw we gave them was very effective. the year 1886, we had what was called a Pacific Blockade of Greece, to make her refrain from war with Turkey, and setting the East in a blaze; that blockade was effective. Under some, but rare, circumstances we could, no doubt, if we were at war with an island State, or a State that had very little means of communication by land, make a great many prizes and bring great pressure to bear on our enemy; but generally, we could do nothing of the kind, and the utmost effect would be to raise somewhat the price of what the enemy obtained from without. would have to get it all by land carriage from the nearest neutral port, instead of having it brought direct to his own wharfs. I will not talk about the possibility, under some circumstances, of independent cruising. My chief fear is, that it might be carried on against ourselves, and I will mention that in a minute or two. But I may say now, that there seems to me to be only one conclusion that we can draw. Mr. Douglas Owen gave us a long series of facts and arguments, and I waited for something that did not come. I dare say it was in his mind, but perhaps he was not bold enough to say it. I am going to rush in where an angel has feared to tread. I say boldly that it seems to me the conclusion to be drawn is, that Great Britain ought to give up championing extreme belligerent rights, and go in for the exemption of private property from capture at sea, except in the cases of contraband, blockade, or unneutral service. I came to that conclusion, and published it more than 20 years ago. Nobody listened then. People are alive to these matters now, and possibly the question will be very seriously considered. It seems to have been proved this afternoon that we stand to gain very little under present circumstances. There is another side to the question: Do not we stand to lose enormously? Remember, that our sea-borne trade-I am speaking from memory-is something like 1,600

millions a year, 1,600 millions carried a year under the British flag. exports and imports of the Power which comes nearest amount to little over 500 millions a year. That Power is Germany, and no one knows exactly, I believe, how much of Germany's 500 millions of external trade goes over its land frontier-certainly a great deal does-and how much goes over the sea. But all ours must, of necessity, seeing we are an island Power, come and go over the sea. Now what a target that 1,600 millions' worth of goods would be to a few independent cruisers of an enemy! Personally, I have not the slightest fear of attacks by a great naval Power, or a combination of naval Powers, upon the fighting Navy. I think it would be a match for them. But what will happen if a State, possibly with a very little fighting Navy, does succeed in making use of one or two fast and well-armed cruisers, under the command of some born sailor, some new Captain Semmes, who was the captain of the "Alabama," which worked such havoe on the United States ships? You say they will be caught in time. Of course they will, and the enemy probably by that time would have all its ports blockaded, and would not be able to send out others. That is possible, although perhaps not quite certain. away goes our carrying trade immediately. If a few more are made, trade of any sort would be enormously diminished. We should suffer We are like a rich man with an acre or two under glass, who greatly. But that neighbour has a has a neighbour with a little greenhouse. small boy with a catapult, and that small boy with the catapult, having an acre or two of conservatories to aim at, can do an enormous amount of damage; whereas, if the irate sufferer in return goes and smashes up the little greenhouse, he has not done very much damage to the neighbour who owns the small boy. I take it we are very much in that condition amongst the nations of the world, and not merely from humanitarian motives-although I confess they do weigh with me-but from regard to our country's safety and her commercial pre-eminence, I say again that all the indications of these changed conditions point to the wisdom of endeavouring to gain from other Powers-fifty years ago, it was only our opposition which prevented it-Powers which might come into a second Hague Conference, after the close of the present war, a general agreement to exempt private property, with the exceptions I have mentioned, from capture at sea in time of war.

ND, K.C., D.C.L., LL.D. (Profe Diplomacy at the University Professor T. HOLLAND, (Professor \mathbf{E} . International Law and Oxford): — I propose to add a very few words to those to which you have been already listening; and first, I wish to join in the thanks to the lecturer for the extremely interesting lecture which he has addressed to us. I also desire to express my general comcurrence with his views, especially with reference to blockade and belligerent convoy having seen their day. As to neutral convoy, I should have liked to have heard something said. That is a very burning question at the present moment, and it is one that ought to be discussed, because I conceive that Great Britain stands nearly alone amongst the nations in maintaining, so far, the right of seizing vessels that are under With regard to the Declaration of Paris, I quite agree neutral convoy. I think, since the Spanish War, that that is International Law now. and the conduct of both parties then, it is quite clear that the nations that have stood out have come in, and it may be regarded as fixed International Law, and therefore, I am quite certain we cannot properly back out of it if we wished to do so. One point on which I am not quite clear

that I can concur with the lecturer is with regard to the probable loss of our trade by transfer to a neutral flag. Transfer to a neutral flag is by no means so easy as is sometimes supposed. Our enemies would look uncommonly closely into such transfer. First of all, the enemy recognises no transfers that take place while the ship is at sea, in transitu, until she has been taken possession of by the vendee; and, in the second place, he looks very closely into all the papers on board, and satisfies himself that the sale is a perfectly genuine one, or he will not recognise it, and will seize the property. So that I do not rate quite so highly as the lecturer the danger of property passing to a neutral flag during war; it is not so easy to hand over the property. As to the moral drawn by the lecturer, I was not very clear. Perhaps he can tell us what is the practical step he wishes us to take, in order to improve our position? I do not quite gather what he would do. Does he want us to go back on the Declaration of Paris? To my mind, he was not so clear on that as on the rest of the topics he touched; but, no doubt, he will clear up the point in his reply. Dr. Lawrence, who has just addressed us, has gone into a wider topic, not touched upon by the lecturer: the exemption of private property at sea. It is a topic which, as far as I know, was first started in English literature, and argued carefully by my dear friend Mr. Hall, 30 years ago, in the Contemporary Review. He thought that it was for the interest of the British nation to get rid of the capture of private property. The discussion has smouldered ever since. is the real interest of this nation, I for one have never been able to convince myself. I think it is probably a question more for naval men than for lawyers. But there is this difficulty about it, which I think is a very serious one, that even supposing it is in our interest to get rid of capture of private property at sea, and supposing that the other nations come into the arrangement, which, I think, is more than doubtful nowadays, after the writings of such persons as Admiral Aube and others, in France, who, I think, indicate a somewhat unscrupulous policy of sinking and destroying everything belonging to the enemy which they come across; but that supposing the nations come into it nowadays, and that they all sign a new Declaration of Paris on the point, can we quite trust to it, when it comes to the pinch? Can we trust to a paper document in contravention of general usage and unsanctified by prescrip-I do not feel sure that we can; and that is an additional scruple I have in adhering to the view that we ought to get rid of the capture of private property at sea. I doubt now if Continental opinion is so much in favour of it as it was 20 years ago, and if it were, I do not know whether it is at all for the interest of this country. Further than that, I do not know whether we can wholly trust forthwith to a paper contract, even were it signed by all the Powers, resigning the right of such capture. When I look at some of the literature on the subject, some of the expressions of the French admirals-Admiral Aube became Minister of Marine afterwards, and his words therefore, must carry some weightwhen one finds such reckless expressions as even used by responsible Continental authorities, I begin to wonder whether we can trust to a piece of paper upon such a subject at all.

Major Stewart L. Murray (Res. of Off., late Gordon Highlanders):—
I do not presume to criticise in any way the able and interesting lecture to which we have just listened. But there is another point of view from which the subject should also be regarded, and to which I would like to draw attention. The first point I should like to emphasise is this: The

lecturer appeared to think that the progress of civilisation will lead to a greater respect for treaties. I submit, however, that the opposite conclusion is more probable. For civilisation tends to draw all nations, who are connected by blood, into great Empires or Confederations. When, in the future, war breaks out between two such mighty Empires or Confederations, the interests at stake will be so enormous, the dislocation of trade and industry, the ruin and misery, caused by the prolongation of the war will be so gigantic, that it will become the supreme duty of each belligerent Government to strive to bring the war to a victorious conclusion in the shortest possible space of time. To this end it will be necessary to deal the enemy the heaviest possible blows in the shortest Before this supreme duty, all other minor possible space of time. duties, among which I would class that of adhering to the dead letter of fossil treaties, must give place. If such treaties stand in the way of inflicting the greatest possible damage upon the enemy in the shortest possible time, either by battle or by the destruction of resources, then such treaties will not be, and should not be, regarded. I submit that this is the practical view of the matter which we should always keep before us in all consideration of, or preparation for, future warfare, and that we should not omit any single precaution because of any old treaty which can any day be torn up and thrown into the waste-paper basket. As regards International Law, we cannot depend on that, for, strictly speaking, there is no such thing as International Law. The thing so-called is merely a collection of historical customs and precedents, and any nation powerful enough can, at any time, add a fresh custom or set a fresh precedent. For us, therefore, to in any way depend upon a thing which our adversaries can at any time alter, so as to suit themselves, will be an act of palpable weakness and folly, of which we War, properly conducted, is, as Clausewitz ought never to be guilty. says, "the application of Force in its utmost extreme," tempered only by considerations of humanity in so far as they do not interfere with the most rapid attainment of the object, and the quickest conclusion of the war. In matters of war, the only questions which the practical statesmen of the Continent will consider are those of power and expediency: "Have we power to do this, and if so, is it expedient to do it?" If they have the power, and they consider it expedient, not all the treaties that ever were written and torn up, not all the International Law that ever was theoretically discussed, and practically ignored, will prevent them. Expediency only will be their rule. This brings me to the second point which I wish to make. It relates to food as contraband. In war, whether it is, or is not, expedient to take a certain strong and advantageous measure, depends only upon the probability of such action bringing about, or not bringing about, the armed opposition of a strong neutral Power or Powers. For instance, during the present Russo-Japanese War, the Russians have given up their attempt to make food unconditional contraband, because great Britain and the United States were as one in opposition. From which event, many people rashly argue: "Oh, food can never be declared unconditional contraband, because the United States will never allow it." That argument, however, though it holds good for the present and the immediate future, will not hold good in the near future. The United States at present export about one-third of their crop, and therefore have, indeed, a present pecuniary interest in the immunity of food-stuffs. That interest is, however, only ephemeral, and will grow less every year. For, as I have been informed by M. Snow, the well-known Chicago corn expert (who spoke in this theatre

3 years ago), in 25 years the United States will require all the food they produce for their own consumption, owing to the rapid increase of their In 25 years, the United States will cease to export foodpopulation. stuffs, which will have to come from the Argentine and Canada instead. Consequently, in 25 years, the United States will no longer have any commercial interest in upholding our doctrine, that food shall not be declared unconditional contraband. There will then be no strong neutral interested to secure the freedom of our food-supply in its transit across And a belligerent will then have no reason of expediency the ocean. to prevent him declaring our food-supply unconditional contraband. I consider, a most important point of view, of which we should never lose sight in our preparation for future warfare. Our food-supply in time of war is to us absolutely vital, and I maintain that we must make our count with this fact: that if we are engaged in warfare in the near future, say 20 or 25 years hence at most, it will be expedient for, and indeed the manifest duty of, our adversaries to declare all food-stuffs unconditional contraband of war-treaties or no treaties. And the third point which I wish to make is this, that the same liberty of advantageous action, bounded only by expediency, which our adversaries will claim in the future, will apply equally to ourselves.

Colonel F. N. MAUDE, C.B. (late R.E., O.C. 1st Hants R.E. Vols.): -Perhaps the Chairman, when he sums up, will tell us what Moltke would have said during the siege of Paris in 1870, if our people in London, having trade communications with the inhabitants of Paris, had claimed the doctrine that free railway trucks made free goods. I cannot myself see where the legal distinction comes in. If we are at war with any great nation, which is powerful enough to interfere with our food-supply, I fancy they would say exactly what Moltke, under those conditions, would have said. The foreign attitude, that of the German Staff in particular, on this question of International Law, is opposed to our own. I do not think any Staff in Paris or Berlin or St. Petersburg take the slightest notice of what we call International Law except for the purpose of seeing how they can get the best of us. We go into the Peace Conference at the Hague, and the only outcome is, that we are committed to abolishing the one great advantage we possessed over all other Armies in Europe-the Dum-dum bullet, which could be counted on to stop man or horse that it hit. ob I not know every the want of it tended to protract the decision but that it had some Boer War, effect there can be no doubt. Perhaps you will allow me to quote what I think fairly represents the views of Clausewitz, on the whole question of the conduct of war. He arrived at these after 25 years of about the most serious war experience that a nation could ever have, and his book is in essence the gospel of the Prussian Staff:-" War is an act of violence as natural and legitimate, as all other acts resulting from International relationship, such as those pertaining to commerce, industry, etc." Then: -- "War has but one means of action-force. Its use is absolute. He who uses physical force to the fullest extent without sparing blood will always acquire superiority over the adversary who does not act with similar vigour, and impose his law upon the latter. To introduce the principle of moderation into the philosophy of war is to commit an absurdity. ' It is not said that war is moral or immoral, but simply unmoral. It comes to this, that expediency always governs what a nation will do when hard pressed. It was expediency that took us

to Copenhagen and led to the destruction of the Danish Fleet in 1807, and expediency in the same way will influence French or foreign efforts on our coast and commerce when the time comes, in defiance of all International etiquette that we may lay down. I was brought up with many men in those countries who now hold very responsible positions, and I know that it is as impossible for the leopard to change its spots as it is for these men to go back on the training that they have received. Only recently à propos of the Boer ultimatum von der Goltz reminded us that "the statesman who, seeing war inevitable and being himself ready, hesitated to strike, would be guilty of a crime against his country."

Professor Holland:—May I correct one little statement in the speech of the last speaker? It had reference to the Dum-dum bullet. The Hague Conference does not touch the Dum-dum bullet at all. The topic was discussed in the discussions, but the Convention ultimately signed has nothing whatever to do with the point.

Colonel C. B. MAYNE, R.E.: - I am speaking as a soldier, as two other soldiers have spoken already, and I must say that like them, I cannot follow the wide differences in the procedures of war on land and sea, as laid down on paper. In the 18th century, the traditions of which have not quite died down as yet in this country, war was looked on as a contest between two armies, and those armies were, at the time, often compared to two fencers, and war was considered more or less as a fencing bout, at which spectators—the civilians of the nations at warlooked on, and the private individuals of each country expected their property to be more or less respected. Napoleon came like a shock, and practically said that this was all humbug; that by war he meant that he was going to make the other nations give way to his will, and that to make them give in to him he would do all that lay in his power to injure them. And that is the school in which Clausewitz grew up, and which has practically educated all the Armies of Europe in the view that war is undertaken in order to compel the other opposing nations to give in by whatever means possible, by attacking them or injuring them in their commerce, or in any other manner. The result has been that in war on land, full use is made of the enemy's property wherever it is found. Napoleon took property wherever he found it. In the Peninsular War, we found it paid better, as a mere matter of expediency, to pay the people for what we wanted, as then they brought it forward more readily; but we were a rich nation who could afford to pay. But that was a mere matter of expediency. The Germans, during the Franco-German War, paid or not as they found it more convenient or expedient. was no idea of goods coming in in neutral trains to feed French troops because they were non-contraband goods on neutral rail bottoms do not see why the rule should apply otherwise in naval war. said, that coal for private consumption should not be contraband, because it is for private individual use. Similarly as regards food. Why should it be? One side wants to ruin the other as far as possible, in order to make the latter give in. If it makes distress very keen in the other country, so much the better for compelling it to give in sooner than it otherwise would do. That is the conclusion, I believe, of the lecturer, although we have been a little mystified by the way in which he has expressed himself. I think he rightly wants to put us in a position in which we can injure other nations to a greater extent than

they can injure us. It has been admitted by Dr. Lawrence that under present conditions we have very little to gain, and an enormous amount to lose, and I think that is a very unfortunate position for us to be in, and may, to some extent, rather account for the amusing instance he noticed of a great personage visiting a small country, to back up a minute trade, because he knows the false sentiment we have about certain matters would probably prevent us putting our foot down. Dr. Lawrence, after his instructive lecture here the other day, had a letter from me which I daresay he can remember.

Rev. Dr. LAWRENCE :- Quite well.

Colonel C. B. MAYNE, R.E.: -In that letter I rather backed the Russian action in the East in seizing certain vessels, and I said she would continue to do it until some powerful nation practically cried: - "Stop, please, I shall join you do not." Russia took the hint evidently given, and only gave up when there was a chance of a superior Power stepping in. As Professor Holland has pointed out, these so-called International rules are paper rules, and I think that most nations in a hard tight place will not be bound by any paper rules whatever, when they find that by ignoring them they can compel the other nation, with whom they are at war, to give in, which is the whole purpose of war. The same principle probably accounts for the action, already alluded to, proposed in the writings of certain responsible French naval authorities. French have been brought up in exactly the same school of thought I have alluded to; that war means making the other side give in, and therefore, they are prepared to go to any extent to try and do that. That is what war means. It seems to us landsmen that the fact that there should be one rule for war at sea and another rule for war on land is rather puzzling.1

Mr. Douglas Owen, in reply, said:-I have listened with great interest and pleasure to the remarks that have been made, more especially the remarks of Dr. Lawrence and Professor Holland, because their opinions carry such weight that I could not but feel complimented that they agreed with me in principle. So far as Dr. Lawrence and myself are concerned, the points between us are merely of detail. With regard to coastal traffic, I think he rather over-estimates the amount of privileged coastal traffic existing now. Very little remains. But as far as it does exist, I agree with the conclusions he has drawn. With reference to his remarks on the United States, and what took place 40 years ago, I would point out that it is 40 years ago, and if he has followed the progress of railway events in the United States since then, he will know what immense changes have taken place in the United States, and the effect on our general Both Dr. Lawrence and Professor Holland complain that I have made certain statements of facts without drawing from them any conclusion as to what we should do. That criticism is perfectly just; but, as Dr. Lawrence was kind enough to suggest, it is not because I

¹ If certain notable generals have devasted large areas of theatres of war, in order to bring pressure to bear on their opponent's will, and to enforce on him the desirability of giving in, and as they have been considered right in doing so—war being an appeal to the arbitration of brute force, skilfully used, if possible—then there is no military reason why the same principle should not be applied to sea warfare, as it is applied to land warfare.—C.B.M.

have not got an opinion. I have a very strong opinion; but I did not think it advisable to express it in my paper. I hold strongly with him, and I think with Professor Holland, that we ought to declare all private property at sea, all innocent private property at sea, exempt from capture, in the same way as private property on land. *

Professor Holland :- I do not hold that.

Mr. Owen :- I beg your pardon; it was Dr. Lawrence.

Professor Holland :- I do not mean to commit myself to that.

Mr. Owen :- Anyhow, I think I may claim the Rev. Dr. Lawrence.

Rev. Dr. LAWRENCE :- Certainly, I am with you there.

Mr. Owen:-It was a slip of mine. I thought if I were to come here and read a paper expressing a view which I imagine is not very popular with naval men, I might weaken the general effect of my paper. I thought I would rather state the facts as they present themselves to me, and let others draw their own conclusions. But if I am asked to say what is my own opinion, I do not hesitate to say it is that of Dr. Lawrence. I go further, and say, that I have myself no doubt whatever, that the time will come when that opinion will prevail. The United States, as we know, are strongly in favour of it already; there is a Bill before the United States Senate at the present time absolutely proposing a law in that sense. When war was declared between France and Germany in 1870, Germany proposed to respect all private property; that may easily have been, because Germany knew France was much stronger; but when France declined to adopt the German view, I think the Germans said they would not follow the principles they proposed. But Germany did propose it, and there is, no doubt, a growing opinion that private property at sea, the private property of innocent persons, should be as exempt from seizure and destruction as innocent private property of persons on land. If it is asked why there should be any difference between warfare on sea and warfare on land, I am not prepared to answer the question; I can only point to the fact there has been always a distinction, and I believe there always will be. It may be that we only exempt private property on land from expedience, but still expedience is a powerful force, perhaps even more powerful than International Law, and I think it is expedience rather than a sense of moral rectitude which will prompt other nations at war to observe International Law as it stands. after time International Law has been observed only through the sense of expediency, which is another form of expressing the neutral conscience; it is a method by which the neutral conscience expresses itself. the speakers said that Russia started by saying she was going to seize everything, and did not care about International Law. Doubtless, this was so; but as soon as England said:-"No, but we care, and you must stop these illegal actions"; Russia recognised the force of, as my friend called it, expediency, and as I call it, International Law. Professor Holland I understood to ask what was my conclusion as regards Well, we are in the Declaration of Paris, and what did I recommend. this position: that if we go to war, with the Declaration of Paris as it is now, we shall lose a great part of our trade. I do not know whether I misunderstood Professor Holland, or whether he, to some extent, misapprehended me, but I was not referring so much to the transfer of British property. I quite recognise all the Professor says as

to the difficulty of selling ships; I am quite alive to that, and in accord with him. I was referring to the driving of our trade into neutral So long as we have the Declaration of Paris in its present form, that is to say, so long as we hold ourselves bound, as, I think, we are, we are between the devil and the deep sea, the hammer and the anvil. We ought to do one of two things. We ought either to stipulate, as a condition of our maintaing the Treaty of Paris, that all private property at sea shall be declared exempt from capture, or else we should strike ourselves off the Declaration of Paris, and go back to things as they were. As it is, others are in a position to play fast and loose with us. With regard to the other criticisms, I have given my reasons why I I do hold strong reasons, and I am did not express a conclusion. prepared whenever the time comes to express them in the best way I can; but I did not think it advisable to express them in this paper. I do not know that there is anything special that I need further refer to, except, perhaps, this: -One of the speakers seemed to imply a doubt as to whether the Declaration would stand when we actually got to war, I believe whether it would not be regarded as waste paper and torn up. that we and the United States and Japan are strong enough, so long as we behave reasonably, to make what reasonable law we like at sea, with every belief that it will be respected. As regards the French, I should have felt inclined to say the same thing for them; but then Professor Holland reminded us of the wild words of Admiral Aube, and it shakes our confidence. I hope we need not take Admiral Aube seriously.

The Chairman (Colonel Sir H. M. Hozier, K.C.B.): — We have had a most interesting and instructive lecture, and I feel that after such an interesting lecture, and the criticisms we have heard from some of those most distinguished for their knowledge of International Law in this country, it would be quite a work of supererogation on my part to make any remarks on the subject. I shall, therefore, confine myself to the very pleasing duty of asking vou to accord a very hearty vote of thanks to Mr. Douglas Owen for the great care he has taken in preparing this most interesting paper, which is interesting to me, not only historically, but also from the conclusions he draws, and from what he foreshadows as to the results on this country of the Declaration of Paris.

THE VON LÖBELL ANNUAL REPORTS ON THE CHANGES AND PROGRESS IN MILITARY MATTERS IN 1904.

Précis from the German by Lieut.-Colonel E. Gunter, p.s.c., (late) East Lancashire Regiment.

PREFACE.

A SKETCH of the wars in progress in the Far East† and in South-West Africa was necessarily included in the Reports for this year. The Reports on individual States were therefore curtailed. It would have increased the bulk of the Volume inordinately to go into Reports of Armies of other than European Powers; an exception to this has been made in the case of the Anglo-Indian Army.

The Reports regarding Train and Transport have, however, again been included. The Report on Communications has been continued in so far as any new matter rendered this desirable.

To my particular regret one of our most faithful and valued contributors, Captain v. Drygalski, has been obliged from health considerations to withdraw from active work with us, which he has continued uninterruptedly since 1886. He was distinguished by his painstaking reports on Russian organisation, which have had much to do with the general favour with which our Reports have been received.

(Signed) VON PELET-NARBONNE, Lieut.-General.

April, 1905.

PART I. ORGANISATION. AUSTRIA-HUNGARY.

A tabular statement, showing the Peace strength of the Austro-Hungarian Army with the stations of its 15 Army Corps and Zara

[†] This is of especial interest now, but space considerations forbade its inclusion or that of the German S.W. African War here. The Report on the Train Systems of Austria-Hungary, France, and Italy, though valuable, has been omitted for like reasons. That on the Anglo-Indian Army is not required by British officers.—E.G.

Military District, was given for 1902 in the JOURNAL for October, 1903, pp. 1117-18. No material changes have been made since then.

The 2nd Army Corps (Vienna) has been reduced by 1 Regiment (2 Battalions), making 13 Infantry Regiments of 49 Battalions, instead of 14 Regiments with 51 Battalions.

The 5th (Pressburg) Army Corps has been increased by 2 Infantry Battalions.

The 14th (Innsbrück) Army Corps has been increased by 1 Infantry Regiment of 3 Battalions, making its total 7 Regiments of 28 Battalions.

The Austrian Militia is organised and grouped as therein stated.

The Hungarian Militia remains as before, and the number of Battalions, Squadrons, etc., has not changed.

The total Peace strength is as follows:-

		Officers.	N.C.O.'s and Men.	Horses.	Field Guns.
Regular Forces Austrian Militia†	 	14,471	286,050	59.770	1,048
	 	2,679	31,676	2,781	
Hungarian Militia†	 	2,298	24,596	3,754	-
Total	 	19,448	342,222	66,305	1,048

No information is given as to War strength or as to Mobilisation, $\epsilon tc.$

The Commissariat Corps and the Pay Department have been reorganised.

New Regulations for the Medical Service in War were issued last year. These are of interest, and are given in some detail in the Report.

The Reserves.

In 1904 the numbers of Reservists called out for training were as under:-

						Men.
Infantry	and	Rifles	-	-	-	240,600††
Cavalry		-	-	-	-	8,400
Field Ar	tiller	·y -	-	-	-	9,400
Siege and			Artil	lery	-	5,600
Engineer	s -	-	-	-		5,700
Telegraph	n and	Raily	way E	ingine	ers	2,300
Train	-	-		-		6,000

4,900 Reserve officers were also called out.

^{- †}The contingent of recruits for 1904 was fixed by Parliament at 14,500 (exclusive of Tirol and Vorarlberg) for the Austrian Militia, and 12,500 for the Hungarian Militia.

^{††}The way in which Continental Powers train and keep up the training of their Rescripts is a lesson to our authorities.—E.G.

Periods of Training.

The one-year service Infantry Volunteers had to do 28 days; after this, those who had served longer were out from 3 to 16 days; second-class Reservists, 28 days.

The Cavalry trained for 28 days from the middle of April, 4 officers and 156 men being called up from the Reserves of each Regiment.

In the Field Artillery, 185 men of the Corps Artillery and 142 men of the Divisional Artillery Reservists were called up. The Garrison Artillery and the Heavy Field Artillery were also trained in proportion.

The Reservists of the Balloon Detachments and the Railway and Telegraph and other Engineers trained for about 13 days.

Of the Austrian Infantry Militia, 1,380 officers, 91,630 men, and of their mounted troops, 96 officers, 3,743 men, and 4,435 horses went through a 4 weeks' course of Field Training.

Gunnery and Rifle Practice.

Between the 31st May and the 13th August a short course of Artillery Field Firing was held at Heymáskér. It was attended by 41 Captains of Field Artillery. In the month's course of Garrison Gunnery, etc., 20 Captains and 1st Lieutenants took part.

From the 25th April to the 15th October the following courses were held at the Army School of Musketry at Bruck on the Leitha:—

Three 5 weeks' courses for the senior officers of the Army, of the Militia, and of the Navy. On an average 110 officers attended

Further courses of Instruction and Experimental Firing, lasting 3 to 4 days, were held. These were attended by 49 Commanding Officers† and Field Officers of both Regular and Militia Forces. They were also attended by young officers attached to War Schools, etc.

The language difficulty has now been met by orders that Reports, Correspondence, etc., are to be written in double columns, in German on one side and in Hungarian on the other.††

THE BELGIAN ARMY, 1904.

The Belgian Army is not permanently organised in Divisions, etc., in Peace; but the 4 Divisions organised for War have their Head Quarters at Ghent, Antwerp, Brussels, and Liège, which are the Territorial Military Districts.

[†]The care with which Field and Commanding Officers are made to keep up their practical knowledge is to be noticed.—E.G.

^{††}At the time of going to press with this précis, the final refusal of the Emperor to allow words of command to be given in other than the German language is reported.—E.G.

The Infantry is organised in Peace by Brigades as under:-

INFANTRY.

	R	egin	aents.		Bat	tali	ons.	(Comp	anie	s.	
Brigades and Stations.	Line.1	Riffe.1	Grena- dier. ¹	Carbi- neers 2	Active.	Res.	Fort- ress.	Active.	Res.	Fort.	Depôt.	Remarks.
1. Ghent 2. Brüges	1, 2	=	_	-	6	2 2	4 4	24 24	8	16 16	2 2	1 Each=3 Act., 1 Res., 2 Fort Bns,
3. Antwerp	5, 6	_	_	-	6	2	4	24	8	16	2	,, 1,, 5,,
5. Brussels	7, 8 9, 10	_	_	_	6	$\frac{2}{2}$	4	24 24	8	16 16	$\frac{2}{2}$	
	11, 12	-	-	-	6	2	4	24	8	16	2	
7. Mons		1, 2	-		6	2	4	24	8	16	2	2 mi A 41 C - 11 - P 1
8. Brussels 9. Namur	13, 14	3	1	1	10 ³ †	$\frac{3}{2}$	7 4	40† 24	12	28 16	3 2	³ The Active Carbineer Bns. have 3 Ordinary and 1 Cyclist Co. each.

[†] I give these figures as they stand. According to the Remarks under (1) (2) the number of Battalions in the 8th Brussels Brigade would be 16 active Battalions.—E.G.

CAVALRY.

FIELD ARTILLERY.

		Regiments.			Squadns.		· i	Brigades.			Batteries.			
Divisions.	Brigades.	Guides.	Rifle.	Lancer.	Active.	Depôt.	Regimen	Field.	Horse.	Active.	Res.	Horse.	Ammn. Col.	Depôts.
1. Brussels { 2. Ghent {	1. Brussels 2. Namur 3. Mons 4. Ghent		1, 2	1, 2 - 3, 4	10 10 10 10	2 2 2 2	1st 2nd 3rd 4th	3 3 3	- 1 - 1	8 7 8 7	1 2 1 2		1 1 1 1 1	1 1 1
Total 2	4	2	2	4	40	8	4	12	2	30	6	4	4	4

GARRISON	ARTILLERY.

ENGINEERS.

TRAIN.

Guns. 204 REMARKS.

	ms.	Ba	tteri	es.	nt.	Battalions.				Cor	npan	ies.	nt.			
Brigades.	Battalic	Active	Res.	Depôt.	Regime	Field Cos.	Fort.	Fort.	Fort. Res.	Act.	Res.	Depôt.	Regime	Cos.	Depôt.	Add *
1. Antwerp 2. Liège 3. Namur	8 4 3	30 12 9	20 4 3	1 1 1	Ant- werp	1	1	2	2	12	12	1	Ant- werp	7	1	3 Spec. Art. Co. 5 Spec. Erg.Co.
Total 8	15	51	27	3	1	1	1	2	2	12	12	1	1	7	1	

^{*} To the above add 1 Co. Artificers, 1 Co. Skilled Labourers, 1 Fuze-Maker Artillery; 1 Tel. Co. 1 Rail Co., 1 Pontoon and Artif. Co., 1 Balloon Co., 1 Torpedo Co. Engineers.

The total Peace strength is:-

Officers.	N.C.O.'s and Men.	Horses.	
3,427	41,046	9,062	

In War the above-given Infantry strength is to be expanded, so that each of the 4 Infantry Divisions will comprise 2 Brigades, each of 2 Regiments, each of 3 Battalions of 4 Companies; and a Reserve Brigade of 2 Line Regiments, each of 2 Battalions of 4 Companies. Each Division has a Company of Cyclists, and a Squadron of Mounted Gens d'armes, and a Field Company of Engineers attached, and about 8 Battalions of Field Artillery with it, besides Technical Troops, Supply, and Medical Services, Ammunition Columns, etc.

The 2 Cavalry Divisions are organised as in peace, increased by 2 Horse Artillery Batteries, 1 Ammunition Column, and a Sanitary Detachment with each.

The number of Reserves, Fortress Troops, etc., available in War is not published.

The total strength of the Field Army is assumed to be 2,513 officers, 97,555 men, 21,541 horses, 204 guns. By another estimate there would be 3,478 officers, 44,220 men on pay, and these would be augmented by 122,852 men without pay. Total men available, 167,072.

The WAR STRENGTH of the chief Units is as under:-

	Officers.	N.C.O. & Men.	Horses.	Carri- ages.	Guns.	At present available.
Infantry Battalion	20	1,060		4	annum.	64 Battalions.
" Čarbineer Bn.	20	935	-	5		4 ,,
Cavalry Squadron	5	165		2		40 Squadrons.
Artillery Field Batt.	5	168	_	13	6	30 Batteries.
" Horse "	5	180		13	6	4 ,,

Manœuvres. etc.

each.

Bat-

No manœuvres on a large scale were held in 1904. The 2 Cavalry Divisions exercised at the Beverloo Camp in July and August. The 1st, 3rd, and 4th Infantry Divisions were assembled there between May and September, and the 2nd Infantry Division exercised at Arlon for 7 days in August.

The Fortress Artillery and Engineers had practice for 5 days in Antwerp, Liège, and Namur in August, and the Troops in Garrison at these places took part in the exercises.

The Infantry School of Instruction was established at the Camp of Beverloo in December, 1903. It it essentially a practical school for the younger officers, and is not confined to Rifle practice. Two courses of 3 months' duration each are carried out between February and August. The courses are especially designed to teach the young officers how to impart instruction, not only in shooting, but in Field Sketching, Field Engineering, Practical Tactics, use of ground, and in administration.

The Normal School of Gymnastics and Fencing has been reorganised. The Swedish system of Gymnastics is followed. There are two courses of 3 months' duration in the year; selected young officers and Captains up to the age of 32 attend. Non-commissioned officers of at least 3 years' service are also selected to go through a course of Training here lasting 6 months.

Officers of Cavalry, Artillery, Engineers, and of the General Staff in groups of 5 or 6 attend the Camp at Beverloo each year to

witness the Field-firing, etc., of the Infantry to which they are attached for instructional purposes in Rifle practice.

FRANCE IN 1904.

The new law introducing two years' service is certain to be brought into force in 1905.* New establishments with regulations for the promotion of officers are published with it.

New Regulations for Infantry; and Cavalry Training; have been issued.

No changes have taken place in the organisation †† or stations of the 19 Army Corps of the French Army since last noticed, or in the 8 Cavalry Divisions. †††

There are 3 Colonial Infantry Divisions and 3 Colonial Artillery Regiments; the 6th and 7th have 3 Divisions each, the others 2, except the 19th, in Algeria, divided into 3 Territorial Divisions.

There is a Division of Occupation in Tunis. Strength: 13 Infantry Battalions, 10 Squadrons, 6 Field Batteries.

The Cavalry Divisional H.A. Batteries are still armed with the old guns, so the batteries are of 6, not 4 guns. The others have the new Q.F. field guns.

The total strength of the Units, or at least of those on the frontier, will be reached in 1905.

Corps Artillery.—On the 12th July, 1904, an Army Order placed each of the two Artillery Regiments of an Army Corps under the immediate command of one of the two Divisional Commanders comprising the Corps. In the case of Corps having 3 Divisions (6, 7, 19), a Half-Regiment (6 Batteries) was allotted to each.

They are still inspected by the Commanders of Artillery Brigades acting on behalf of the Corps Commanders, who supervise their shooting, etc. It was, however, stated in an Army Order of the 14th November, 1904, that this arrangement was only provisional, and that the term "Corps Artillery" is not abolished.

RECRUITING, ETC.

In France the Classes of Recruits are numbered according to the year in which the lists are made out, but the Reservists are not called up till they complete their 21st year of age.

In 1904.. .. 324,253 became liable for service. 25,432 were rejected as totally unfit.

leaving 298,821 fit for service of one kind or another.

^{*}This law was definitely passed on 17/3/05. Some items were given in the Journal for May, p. 589.—E.G.

[†] See the Journal for April, 1905, pp. 477, 475 .-- E.G.

^{††}For details of Organisation see the Aide-Mémoire de l'Officier de l'Etat-Major.—E.G.

^{†††}The composition of these was given in the Journal for 1904, p. 1126.—E.G.

Of these were--

•••	5,257
	27,825
	55,265
	132,850
	62
	703
	14,699
	62,160

Total ... 298,821

The Report goes into great detail of all this. It results in this: that in 1904 202,665 men were enlisted in the Army and Colonial Service and 5,264 into the Navy.

Colonial Service and 5,264 into the Navy.

The number of non-commissioned officers re-engaging has

increased.

Taking one thing with another, the Peace strength may be reckoned at 570,000 men, or 590,000 including Colonial Troops.

The average height of the recruits is now about 5 feet 5\frac{3}{4} inches. Though the annual number of deaths in France has diminished, yet the population is not increasing. The increase of the population in the following States of Europe from 1901 to 1902 was as under:

Germany \(\)

Holland \(\)

15 per 1,000 \(\)

Great Britain 11.9 \(\)

Italy \(\) \(\) 10.9 \(\)

Great efforts are being made by the War Minister to increase the number of the effective officers' Reserve. The democratic tendency to fill the places of officers in the Regular and Territorial Army by the promotion of non-commissioned officers is noticed.

Tabular statements are given of the ages of the Generals and officers of the various ranks in the Army, with the length of service in each grade before promotion; as also the proportion of promotions by seniority and by selection.

The Conseil Supérieur de la Guerre is now composed as under:—
President—The War Minister, M. Berteaux (a civilian who succeeded General André).

Vice-President-General Brugère.

Members—Generals Duchesne, Metzinger, Voyron, Donop, Hagron, Dessirier, Michal, Dalstein, Dobbs.

It is understood that these would be given commands in War.

The Training of the Reserve. etc.

Of the Reserves, were trained in 1904, 8,378 officers, 369,545 men.
,, Territorial Army ,, ,, 9,010 ,, 132,615† ,,

It is the rule that Reservists train with the Units to which they would belong if called out for war; but in 1904 married men and widowers with children were allowed to train with the nearest Unit.

From February to November those who had been from 7-10 years away from the Service were trained, but most of them were called out for training during the manœuvres. Of the Territorial Army, those who had been 16 years away from the colours were called out. The cost of the training was about £720,000.

[†]Contrast this with our Training of Army Reserves .- E.G.

Manœuvres, etc.

In each Army Corps at least one General Staff Ride took place, and in each Divisional District, manœuvres with Skeleton Brigades, etc., commanded by the officers who would lead them in War were held. The Corps Artillery exercised with their Divisions. Cavalry Division practised long-distance rides, etc. The Quarters Staff organised many Staff Rides, conducted by General Brugère, or by other members of the Army Council.

Two Army Manœuvres were held in 1904.† General Brugère conducted those of the VIIth and VIIIth Army Corps in the neighbourhood of Dijon. They lasted 9 days. In the North-West the IIIrd and IVth Army Corps manœuvred under General Hagron; the 1st Cavalry Division also took part in these, which were held near

Dreux, and lasted 9 days.

Great Cavalry Manœuvres were carried out near Bar-le-Duc between the 1st and 8th September by the 2nd and 3rd Cavalry Divisions; a Brigade of Infantry and some Field Artillery also took The 4th, 5th, and 6th Cavalry Divisions held part in these. Divisional Manœuvres.

Most of the Infantry Regiments had 4 Battalions at the

Manœuvres.

Orders have been given that in every Garrison outpost service is to be assiduously practised. In the Cavalry Reconnaissances, where the advanced bodies are far ahead, more special attention is to be given to the despatch-rider and other messenger service, which is to be carried out as in war.

The Army Medical Services carried out several special exercises

as in war.

The total Army expenditure amounted to about £27,000,000, exclusive of the cost of the Army in the Colonies.

GERMANY.

The changes in the well-organised Army of the German Empire mentioned in the Report are so very few as not to be worth bringing to notice.

The number of recruits who voluntarily entered the Army was considerable, viz.:-

On	e-year V	oluntee	rs -	-	-	9,518
	her perio		-	-	-	39,181
	ementary		teach	ers	-	527
		Tota	.1 -	-	-	49,226
The number	r of men	called i	nto th	e Ser	vice	was:
Ar	med ser	vices	-	-	-	203,913
ITI	narmed	,, -	-	-	-	3,670

The number of illiterates was only one man in 2,000.

⁺An account was given of these in the Journal for February, 1905, The new Infantry Drill was to be practised. For remarks on this see the JOURNAL for April, 1905, p. 477 .- E.G.

The Infantry, Riflemen, Field and Garrison Artillery, Engineers, Telegraph and Balloon Detachments now serve for 2 years with the

colours. The Cavalry, Horse Artillery, etc., 3 years. †

Many details of much interest regarding the Educational courses at the Staff College (*Kriegsakademie*) and other educational matters are given in this year's Report, for which it is regretted that there is no room here.

Manœuvres. etc.—Imperial Manœuvres were held in N.W. Mecklenburg, between Lübeck and Wismar, from the 13th to the 15th September in conjunction with the Navy††

Some Cavalry Manœuvres were also held under the Emperor's

guidance.

GREAT BRITAIN.

The Report notices at some length the volte-face executed by Mr. Arnold-Forster in his Army Reform scheme, as opposed to Mr. Brodrick's, and says it is very doubtful if it will succeed. The writer has evidently followed very closely all the rapidly recurring changes made in our organisation. Our establishments, according to the Army Estimates, 1904-5, are given for Home, India, and the Colonies, the approximate strengths being, as stated in the House of Commons:—

Regulars at Home -	-	-	213,010
,, in India -	-	-	77,402
Native Army ,, -	-	-	156,870
Colonial Corps, etc	-	-	18,233
1st Class Army Reserv	e -	-	73,597
Total			520 119

In the above, the Auxiliary Forces are not included.

Estimates of the present Peace strength of an Army Corps and a Cavalry Brigade and the War strengths of Units are also given, with notes of the reductions to take place in 1905 in these.

The strengths and stations of the Troops in S. Africa are carefully recorded with any changes, the total strength being given as 21,000 men, and all other Colonial changes in the year are noticed.

The composition, duties, etc., of the Army Council are gone into

in great detail.

The Reports of the various Royal Commissions, Committees, etc., are epitomised, the Duke of Norfolk's Royal Commission

(Königlicher Anschus) being particularly noticed.

The Report of the Inspector-General of Recruiting is gone into in great detail. The anxiety felt as to the Remount difficulty in case of war is keenly followed. The writer urges the British authorities to breed their own horses for War purposes, and not depend on importations, which at present amount to 20,000, as against 2,000 50 years ago. He says the want of horses is emphasised by the fact

[†]Details have already been published in the JOURNAL for January, 1905, p. 93.—E.G.

^{††}These are said to have abounded in unrealities by those who witnessed them.—E.G.

that our Cavalry Regiments, with an establishment of 714, have only a strength of 516 horses.

The Military Education Reforms and other changes are noticed in detail. The establishment of the School for Cavalry and Yeomanry at Netheravon and the development of the Mounted Infantry, with the course of training pursued, are brought to notice, as well as the formation and practices of the Cyclist (Volunteer Battalions in Easter week, 1904. Even the arming of the Motor Volunteer Corps with the new short rifle is noticed, practice with this weapon being, however, it says, entirely optional.

The Army Budget is given in detail. The result of the above figures being, the Report says, that the British soldier is the most expensive in Europe.

The abandonment of the projected "Army Journal of the British Empire" is commented on, and its intended rivalry with the old-established and valued JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION is deprecated.

Every issue of fresh orders and regulations for Training, etc., in 1904 is noticed, as well as every new map published by the Ordnance Survey.†

The establishment of the Officers' Convalescent Homes at Osborne and in London are spoken of as a noble testimony to the great interest taken by the King in the Army and Navy.

The number of total abstainers in the Army at home and in India is given as 49,719, and the King's permission to drink his health at mess in pure water noticed.

The patriotic activity and energy of the National Service League is especially commented on. The issue of the National Service Journal monthly since 1903 is recorded, and the efforts of the League to bring about the obligatory service in one form or another of every able-bodied man is praised. The people are still out of sympathy with this, it says, but it must eventually come.

JAPAN.

The Report omits Japan altogether from its Part I., owing to its requiring more space for its Military History Section. Perhaps it is because it has been extremely difficult to obtain any information concerning the strength, etc., of the Japanese Armies and their reinforcements during the War. In the JOURNAL for October, 1904, a full account of the Japanese organisation was given. Since then some further particulars have been published.

In the "Historical Section" Part of this *Précis* will be found a comparative table of the Japanese and Russian strength and reinforcements at the seat of War.

^{†&}quot;Eine Reise durch England's Heerlager," Militär-Wochenblatt, 1904-05, gives an idea of the interest taken in our military development.—E.G.

^{††}See some interesting details in the JOURNAL for March, 1905, p. 336, as regards training, interior economy, etc.—E.G.

RUSSIA.

Owing to the present war with Japan, many changes took place in the organisation of the Russian Army, always difficult to follow, owing to its complex nature.

The Russians did not carry out their theoretical mobilisation plans at the beginning of the war, but during the first three months were occupied in forming a new East Siberian Corps out of the existing East Siberian Troops and certain allotments from their European Army.

In Turkestan also restless activity reigned. No important new formations were organised, but the existing ones were enlarged and strengthened.

The Report gives nine pages of tabular statements showing the stations and strengths of the Russian Army at Home, in the Caucasus, and in Turkestan at the beginning of the war last year. The Reserves, the Technical Troops, and the Train are also enumerated. The Siberian Field Army and the Garrisons of the Fortresses are detailed, with the Ersatz Brigades and Battalions. There were about 260,000 men in the Fortresses, 300,000 Reserves, and 700,000 National Guards altogether. About 32,000 were guarding the Communications.

The strength of the Russian Army has been often epitomised in tabular statements in the Journal, so these are not reproduced here.

The Report says it has not space to enter into all the changes that have taken place in the year, but this may be done in future numbers.

The précis in the JOURNAL for October, 1904, p. 1139, briefly alluded to the formation of the IVth Siberian Army Corps. In the end of 1903 and in 1904 the Vth and VIth Siberian Army Corps were formed, comprising the 54th and 71st, the 55th and 72nd Infantry Divisions respectively, and moved to the seat of war, their places in Garrison being filled up by Reserve Divisions.

On the whole there seems to have been no great difficulty found in mobilising the forces required for the war. The Siberian Army Corps were gradually strengthened by portions of the Russian Home Army, and yet sufficient forces were kept at home to preserve internal order during the recent crises.

The Tabular Statement in the short account of the Russo-Japanese War in Part III. shows how their forces in the Far East were gradually strengthened.

SWEDEN, 1904.†

The Swedish Army is organised by Divisions and Brigades in time of Peace. In War, Armies or Army Corps would be formed.

[†]The Report on the Norwegian Forces is omitted for want of space. It says that the war strength of the Line and Landwher would probably be about 50,000 men, with a trained Landsturm of about 20,000. They have Q.F. Erhardt field guns with protecting shields.—E.G.

DISTRIBUTION AND STRENGTH OF THE ARMY IN PEACE.

Army	I	nfan	try.	Cav	alry.		Arti	llery.			ition Hery.	For Arti	tress llery.	Eng	inrs.	Trai Am	in & bnce
Divisions.	Regts.	Bns.	Cos.	Regts.	Sqdns.	Regts.	Brigs.	Field Batts	Horse Batts.	Regts.	Batts.	Regts.	Cos.	Corps.	Cos.	Corps.	Cos.
1. Helsingbord 2. Linköping 3. Sköfde 4. Stockholm 5. Stockholm 6. Hernösund	5 4 4 5 4 5	10 8 8 10 8	40 32 32 40 32 40	3 1 1 1 1 1	25 5 5 5 5 5	1 1 1 1 1	3 2 3 3 2 2	6 6 9 9 6 6	3			- 1 - -	4		- 6 8	2 1 2 - 1	4 -3 5 -3
Total	27	54	216	8	50	6	15	42	3	1	2	1	4	4	14	6	15
In Gothland	1	2	101	_	_	_	1	2	_	_	1	_	_	1		-	1
Grand Total	28	56	$226\frac{1}{2}$	8	50	6	16	44	3	1	3	1	4	5	14	6	16

The total strength is about 2,293 officers and 18,548 noncommissioned officers and men. This can be increased under ordinary circumstances by about 25,600 of the 1st, 2nd, and 3rd Classes of men liable for service.

The approximate numbers of trained Reservists are as follows:-Officers, 700; non-commissioned officers and men, 1,500.

Then in the 1st Ban men from 21 to 28 years old there are about 175,000 75,000 29 to 32 2nd 150,000 3rd(Landsturm),, 33 to 40

> 400,000 Total

The men serve 2-3 years with the colours. Then they can extend their service 2 years to the age of 28 or 32 if corporals.

Education, Manœuvres, etc.

In the Artillery and Engineer School the ordinary course lasts for each branch one year. There is a Higher Technical course for each lasting 2 years.

The Staff College admits officers every year. The course lasts 2

The number of officers attending is limited to 25.

Grand manœuvres were held under the direction of the Crown Prince in the country west of Söderhamm from 20th to the 25th September, 1904. The 5th and 6th Infantry Divisions took part in these.

THE ANGLO-INDIAN FORCES.

The Report goes into the details of the Army in British India, taking its figures, etc., from the Indian Army List of October, 1904, and from the Statesman's Year Book of that year, which it is unnecessary to reproduce here. It says the Indian Daily Telegraph puts the total strength of the Regular Forces in India at about It remarks 220,000 men, of whom about 170,000 are combatants. on the small proportion of Volunteers, and quotes Lord Kitchener's opinion, that it is the duty of every British subject not belonging to the Naval or Military Forces to enrol in the Volunteers.

Lord Kitchener's reorganisation scheme is gone into in some detail. The recruiting possibilities and mobilisation plans are examined, and the increased number of rounds issued to both Cavalry and Infantry noticed. Mobilisation, says the Report, would entail large numbers of Troops on the Lines of Communication, and these are not forthcoming.

The great improvements made of late in India in the manufacture of these weapons, carriages, and ammunition are brought to

notice.

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PART II.

Reports on the Progress in the Separate Branches of Military Art.

II.—TACTICS OF INFANTRY AND OF THE COMBINED ARMS IN 1904.

A. War Experience and Questions of General Interest, by Major Balck.

The views expressed regarding the conduct of War by the British in S. Africa have been generally confirmed by the experiences as far as at present known of the War in Manchuria. Care must be taken not to be hurried into premature conclusions by the reports the 30th April and 1st May, 1904, the Russians lost 70 officers and 2,324 men out of 6,000. From the 13th to the 15th June the Stakelberg Corps at Wafanku, having 35,000 men and 94 guns opposed to 40,000 Japanese (who were victorious) with 200 guns, lost only 113 officers and 3,363 men, and the Japanese 50 officers and 1,163 men. On the 22nd June, at Kinchau, the Russians lost 30 officers and 800 men out of 10,000 men on the defensive, while the Japanese, committed by the ground to a frontal attack in the open, lost 151 officers and 4,173 men out of 30,000. This action is remarkable for the attackers in the open being able to get within 600 metres of the defenders' trenches; but here, as later on at Liao-yang on a much larger scale, it was the surrounding movement which gained the The attempt, as on the Sha-ho, to break down the enemy's resistance by pure frontal attack has no chance of success. Whoever wages war must attack, and modern weapons have even increased the power of the attack. These have not really brought about any change in Attack Tactics. The Infantry is by no means compelled to resign its leading part to the Artillery; its moral effect still asserts its importance in bringing about the decision. The fighting method of the Japanese is characterised by cautious advance, by a long struggle for preponderance of fire, followed, however, by energetic fearless rushes to the front, and captured points are quickly arranged for It is rightly recognised that turning movements are useless All attacks are This, especially unless supported by simultaneous frontal attack. supported by the united action of massed Artillery. in the earlier battles, never gave the numerically inferior Russian guns a chance of coming into action.

The Russians fought with narrow fronts and great depth, clinging to the old cut-and-thrust tactics. At Wafanku the abortive attack of the Russian left wing was formed with but 8 deployed Companies in the first line, 4 in the second line, and 3 in the third line. Their predilection for volleys disappeared in the course of the campaign.

Their attack was characterised by a direct advance, with little preparation by fire, in inflexible formation, on a narrow, easily enveloped front. On the defensive they used the spade with much zeal, tracing many well-constructed trenches directly in rear of one another. In nearly every case the fight ended with a regular formal counter-attack straight to the front. The knowledge that the defensive line should be thinly occupied in order to keep as many as possible in hand was by no means common property in the Russian Army. This practice met its due reward, as at Liao-yang their defensive works, which it had taken weeks to construct, had to be evacuated when the Japanese, crossing the Taitse-ho beyond the reach of the fire from the Russian trenches, enveloped them. The tendency of the Russian leaders to make many detachments, which had been observed in the Turkish War of 1877-78, showed itself again in the War in Manchuria. We see Advanced Guards thrust too far forward and left to their own devices, and Rear Guards kept back too far in rear with a portion of the Artillery of the Main Body.

On both sides we see much use made of the darkness to advance over ground unswept by fire, and then to pour in an overwhelming fire at early dawn, or else to complete a victory nearly won the previous evening. Night attacks on a larger scale are naturally absent.

Many circumstances have given this war the characteristics of a

war of Positions.

The necessity for the Russians to act on the defensive while awaiting reinforcements, and on the part of the Japanese the difficulties of Transport and their constantly being in close touch with the enemy made it difficult for them at first to employ masses in one action. After Liao-yang both sides needed rest. Then both Armies being equally reinforced, the balance was restored. The longer two Armies face one another under these conditions, and the stronger their entrenchments, the more will the war resemble Fortress Warfare. In this frontal struggle for the mastery, working out round by the flanks can alone bring about a decision. In modern times the only similar example we have is that of the Federals working round the Richmond-

Petersburg position.

The suppression of the Rebellion in German South-West Africa was due to the management of the Transport, to resolution in overcoming local difficulties, and to the self-abnegation of the men. The power of the Hereros was broken by 1,500 rifles, 30 guns, and 12 machine guns extended over an area of 40 kilometres (25 miles). Close fighting in close country accounts for the large proportion of losses of officers to men (about 1 to 8), and of dead to wounded (about '98 to 1). The Report goes at some length into the experiences gained by the British in the Boer War as to the most practical colours for uniforms, equipment, etc.; the fatal brilliancy of such articles as swords, bright buckles, even aluminium telescopes, helmet ornaments, etc.; and to experiments made in Denmark and Switzerland as to the colour of clothing, the main thing determined being that troops of all arms shall be clothed alike. In Austria many think all should wear a kind of grey, as worn by gamekeepers.

Cyclists, Signallers, and Snow-shoe Riflemen have all been experimented with in the past year. With the exception of England, no Power has adopted Mounted Infantry. They are only of use to take the place of Cavalry (when suitable horses for them are obtainable) in Reconnaissance close to the enemy, in Outpost duty, as

despatch riders, and for the occupation of advanced positions. They can never really replace Cavalry in distant Reconnaissance, in Raids, or in action.

Machine guns were used by the Germans with effect in the Waterberg actions in S.W. Africa. The old-fashioned ones at first used in Manchuria by the Russians with high travelling carriages were soon silenced. Later on others were able, under favourable conditions, to develop good fire-power. The necessity of employing them in pairs was shown. While England only allows single machine guns to Battalions of Infantry and Regiments of Cavalry, other Powers employ them always in Batteries of from 4 to 6 machine guns.†

B. INFANTRY TACTICS IN INDIVIDUAL STATES.

Austria-Hungary.—The year under review was devoted to the trial of the Provisional Infantry Drill and Musketry Instruction. The former differs only immaterially from the German, especial attention being given to Preparatory fire. "Infantry attack is simply the carrying forward of an overwhelming fire; it is therefore a continued struggle for superiority of Fire," said Lieut.-Colonel Smekal in Part IV. of the Austrian Organ der Militürwissenschaftlichen Vereine, Vienna. Only thick swarms of skirmishers can carry this Fire forward. Without the support of Fire, advance is impossible. The method of advance matters little. That least exposed to loss is chosen. Running and creeping forward are both indispensable. Bayonet fights "are improbable; yet an Infantry inspired with the spirit of Attack must not shun it. Pursuit is the harvest of the work of the Attack. This must aim at the annihilation of the enemy."

France.—The Report repeats all the different views of Genera's Brugère, Kessler, and de Négrier, formed after the Boer War. These we epitomised last year.†† Major Balck combats the latter's opinions and proposed methods of advance, and says that no enemy worth the name will allow himself to be turned out of a Position by fire alone. A determined assault must take place.††† The new French Règlement of 1904 is, he says, not the outcome of authority in France, but those of a certain section only.

In the introduction of the Règlement it is stated that the reduction of the length of Infantry service to two years with the colours will necessitate the omission of all manœuvres not practicable in war. The danger to which even small closed bodies are exposed when under fire requires flexible formations which can adapt themselves to the folds of the ground, and wide intervals between groups. Everything is simplified. Battalion drill is reduced from 21 pages to 4. Volley firing at night in reintroduced, and is also to be used when the men

[†]The British used them "en batterie" as far back as at the Battle of the Atbara in the Soudan. Each Infantry Battalion has two machine guns, and each Cavalry Regiment 2 machine guns and 2 pom-poms now.—E.G.

^{††}See Journal for October, 1904, p. 1149.--E.G.

^{†††}Titre V., par. 263. "Assaut" of the Reglement seems, however, pretty firm on the subject —E.G.

are out of hand. Independent Fire with a named number of rounds. Against this may be urged that in the heat of the Fire-fight, men do not count their rounds, and that it is better to let them go on firing as long as a good target offers. The offensive spirit is, however, remarkable throughout the volume, the success of the attack being said to depend on the fire effect and on the nature of the country.†

One of the peculiarities of the French Regulations is the pushing forward of Independent Detachments of all arms far in front of the Advanced Guards, to fend off the enemy's reconnoitring parties, either to stop or to mislead him, to act against his flanks, or induce his

premature deployment.

General Bonnal, in his book "L'Art nouveau en Tactique," has severely criticised this petty "guerre de rideaux," as he calls it, which, he says, is opposed to decisive tactics. The danger of the strength of the attack being spent in a number of isolated smacks, instead of a good knock-down blow, is greater than the advantage of opportune feints threatening and annoying the enemy.

The troops destined for the Assault are divided into preparatory and manœuvring portions. Every Body, from the Division upwards, provides its own Reserve. On the defensive, advanced bodies are used to gain time, and great significance is given to the fight for

localities.

Retirement from one position to another is recommended so as to draw the attackers on to unfavourable ground. The decision is to be brought about by the offensive of the manœuvring portion of the Reserves.††

The Reglement abjures in toto the former cut-and-dried schematic rules, but seems to go too far in this. No good system of training

can dispense with definite directions.

The French group system has been devised to minimise loss in crossing open ground. This can never be avoided in great battles. The system is calculated to interfere with the preparation and execution of concentrated attack, and to lead to partial engagements entailing much loss.

General le Joindre, in his "Comment on obtient la supériorité du feu" (Paris: Lauvanzelle), a distinguished writer on Fire-tactics, is against rapid fire, and seeks to increase the intensity of fire by

bringing more rifles into action.

Germany.—In contrast to the tendency in France and England to develop the free unrestricted activity of the individual skirmisher, careful drill and education combined with thorough training in shooting (war practices), is inculcated in Germany. Drill is an excellent means to accustom the man to implicit obedience, to regularity, and to the exercise of all his powers. But in the place of the drill of line and column, which converted the soldier into an unthinking machine, we now put the drill of the individual man.

[†]See note ††† p. 1279.

^{††}The Règlement calls "contre-attaque" those counter-attacks delivered before the attackers are in the Position, and "Retour offensif" those made to dislodge the assailants from ground already won by them. —E.G.

The training of the individual skirmisher for battle makes such great demands on his time that all superfluous manœuvres, etc., must be eliminated from our drill-book. So by A.O. of the 27-1-05, dressing back, square and double column movements have disappeared, and battalion drill has been simplified therein. Every kind of cut-and-dried form of attack has been abandoned. Cover is to be utilised where practicable. Where it is not, thin lines of skirmishers are pushed forward, which gradually strengthened, work up to within decisive distance of the enemy. No deviation from the direction of attack to gain cover is allowed. Close formations are given up where circumstances admit of it.

On our practice grounds also the impossibility of close formations within effective range of modern fire until that is subdued finds expression.

Broadly speaking, Infantry attack is carried out as follows:—Skirmishers 5 to 10 paces† apart advance by short irregular rushes of 30 to 40 paces. The frontage of an extended company at war strength†† is increased from 100 to 150 metres. Proportionate extension up to the Battalion and Brigade is allowed. Lines of skirmishers follow one another at considerable distance apart to the nearest cover in the line of advance. Failing this, to within effective and decisive ranges. Strengthened by reinforcements, fire is opened; under cover of this, forward rushes as above are made, until superiority of fire is attained, when the enemy's position is finally assaulted and penetrated, supported by companies in close order who have worked up under cover of the skirmishers.

Creeping forward instead of rushing forward seems to be equally good. The Russian method seems the best. Each skirmisher throws himself at full length on the ground, rests his head on the left arm, elbow bent, the right hand grasping the rifle. The creeping forward is managed by alternately bending and straightening the right knee, pushing forward the body, which is not to be raised nor is the head to be lifted off the left arm except for aiming. This is less fatiguing and less exposed than creeping on all fours.§

New machine gun practice regulations have been issued.

Great Britain—In their manœuvres the British Infantry showed great skill in the use of ground. Their thin khaki-clad skirmishers were scarcely visible. No detachment even was seen in close order within 3,000 yards. Frontal attack was entirely avoided. No attack on entrenched positions was adjudged successful unless with a numerical superiority of 6 to 1. The excessive extension allowed militated against a really powerful attack. The machine guns were too exposed. Volley-firing is abolished. Slow-fire and Rapid-fire—the latter not exceeding 15 rounds a minute—being alone used.

New Mounted Infantry Regulations have been issued, the average rate of marching being laid down as 5 miles an hour, 20 in a day. But on occasion 40 to 50 miles may be covered without permanent injury to man or horse Amended Musketry Regulations are also in force provisionally.

[†]The German normal pace is '80 metre = 31½ inches long.—E.G.

^{††}About 250 rifles.—E.G.

[§] This question is well discussed in an article by Captain Schultz in the "Jahrbücher" for January, 1905, p. 41:—"Sprungweises Vorgehen," etc.—E.G.

Italy.—Cyclist Regulations have been issued. Cyclists may do good service with the advanced Cavalry, and accompany them in Reconnaissance and in action. The strength of a Cyclist Company is 7 officers and 120 men, divided into 4 sections. At present the folding "Carraro" cycle is used; weight about 26 lbs. without load, 55 with. Ordinary rate, 5 miles an hour; rapid, 12½ miles. 50 miles is considered the extreme length of a day's march. The Cyclist Company of the 12th Bersaglieri, however, made forced marches in August last of 65 and 79 miles respectively. Climbing the Stelvio Pass on the 24th August they were overtaken by a snowstorm, and took seven hours to accomplish it, carrying their cycles on their backs.

Russia. — The Divisional Cavalry being but half a Sotnia of Cossacks, each Infantry Regiment has 13 Despatch riders attached. They are trained by the Adjutant. In war, casualties would have to be replaced from the ranks of the Cavalry, or, if these cannot do so, by specially trained Infantrymen.

Switzerland. — The folding cycle has, after many trials, been finally rejected and a regulation cycle decided on. Cyclist Infantry are now to be used for fighting as well as for messenger service. They will also undertake the frontier Outpost Service Reconnaissance and screening duties, especially in night marches, according to Lieut. Colonel Immenheufer,* who has laid down the principles governing their organisation and employment. It is proposed to attach a messenger and 1 Fighting Cycle Company to each Infantry Division. It is calculated that even in mountainous country, from 5 to $7\frac{1}{2}$ miles an hour can be accomplished, and from 50 to 75 miles a day.

United States.—The American Infantry Drill of 1904 contains much that is antiquated. Volleys, Independent Fire, Fire at will, and Rapid Fire are recognised, the former in defence or in attack when used from a height to fire over the heads of the attackers; the second in attack up to 600 yards; the third from that to about 300 yards, or until assaulting distance. 4 Companies form a Battalion, 3 Battalions a Regiment, 3 Regiments a Brigade; 3 Brigades a Division, 3 Divisions an Army Corps. In attack the thinly extended Company is reinforced until about 1 man per yard thick at 600 yards from the enemy. From 800 yards onwards the advance is by alternate rushes of groups of about 50 yards up to about 600 yards from the enemy rapid fire is opened; the Reserves At about 200 yards from the enemy rapid fire is opened; the Reserves reinforce the Firing Line, which doubles forward until at about 30 yards from the position the Charge is made. The 3rd Battalion of each Brigade is kept in hand by each Brigadier.

It is true that these Regulations are subject to modification, according to the ground, the enemy, etc., but they present a wonderful picture of an impossible cut-and-dried attack, resembling much the "Instruction de Combat" of the late General Boulanger.†

^{* &}quot;Beilage zur Schweizer allgemeinen Militär-Zeitung, 1904, Radfahrende Infanterie."

[†] Though this scheme of attack could not possibly be carried out in the face of modern fire by determined, well commanded European troops, the advantage of having 3 Brigades to each Division is here shown.—E.G.

C. TACTICS OF THE COMBINED ARMS.

Austria-Hungary.-The projected Autumn Manœuvres last year were abandoned owing to the drought in Bohemia. Major Teisinger has published in the 68th Vol., Part 3, of the "Organ der Militärwissenschaftlichen Vereine, Vienna, a critical Review of the Regulations for Field Service as regards Security on the March, Outposts, etc., of the leading Armies of Europe. He is in favour of large Advanced Guards. Among other reasons he gives that of the shortening of the time required for the deployment of the Main Body for action. He also mentions the advantage of being able to develop rapidly considerable force on a broad front in case of encountering the enemy on the march. An anonymous Austrian Staff Officer goes into the matter of outpost arrangements under different circumstances of country, situation, etc., and says the normal dispositions of mixed outposts as set forth in the German, French, Italian, and Russian Instructions can seldom be applied in practice without considerable modification. (Studien über Vorposten, von einem Generalstabs Offizier.)

France.—The Report mentions, but does not describe, the French manœuvres† from the 4th to the 15th September of the VIIth and VIIIth Army Corps, each strengthened by an Infantry Division and with a Cavalry Division of 2 Brigades, and 2 H.A. Batteries attached. General Brugère conducted these, and insisted on the massing of Artillery and strict preservation of the prescribed frontage in attack, most careful use of cover by the first line, etc. He particularly enjoined the correct use of Reserves.

The IIIrd and IVth Army Corps operated in the N.W. under General Hagron. He divided each of the Army Corps into 4 mixed Brigades of all arms to carry out General de Négrier's ideas. This did not answer. The difficulties of conveying orders, etc., were too great. Attempts were made to attack with masses at the decisive point, 3 Brigades of the IIIrd Army Corps being launched against the left flank of the IVth Army Corps. The latter had 1 Brigade in the front line and 2 Brigades in Reserve for counter-attack.

Germany.—The Imperial Manœuvres of 1904 from the 7th to the 15th September were characterised by the mutual co-operation of Army and Navy, and offered a wide field for various experiments. The Guard and IXth Army Corps, strengthened by Reservists and others from other Corps, each brought 3 Infantry Divisions with 1 Cavalry Division, in all about 60,000 men, into the field.

A mixed Brigade of 3,600 men, 8 guns, and 25 wagons was landed in 3 hours. The two corps were left unfettered to act against each other, and everything, even to the Supply Trains, was carried out as in War. Thus much instruction was derived.††

In the three Army Corps attacks against an entrenched position with live shell, bullets, etc., were carried out.

[†]These are described in the "Militär-Wochenblatt," Nos. 126, et seq., and the "Jahrbücher" for November.—E.G.

^{††}Many German officers are of opinion that the situations abounded in unrealities as usual; the presence of the Emperor necessitated of course special arrangements.—E.G.

Many books have appeared during the year, Attack, Defence, etc. Major Bronsart v. Schellendorf brought out a 4th Edition of the well-known work of his father, "Der Dienst des Generalstabes"; a 2nd Edition of Captain Immanuel's "225 Taktische Aufgaben"; and the 13th Edition of the official "Leitfaden für den Unterricht in der Taktik" ("Guide to Tactics ") used in the War Schools have appeared. Colonel Griepenkerl has finished the 5th Edition of his "Taktische Unterrichtesbriefe," ("Letters on Applied Tactics"). Lieut.-General von Alten has published Vol. II. of his "Kriegskunst in Aufgaben" ("Problems in the Art of War"),† and Major Balck has completed by a 6th Volume his work on Tactics ("Taktik"). This Vol. includes combats for localities, Night Attacks, Passage of Rivers, Guerilla and Mountain Warfare, The same author's brochure, "The Employment of the Three Arms in Action," appeared as Appendix 7 to the Militär-Wochenblatt of 1904.

Great Britain.-The Autumn Manœuvres which took place in England, near Colchester, in Essex, have been criticised in the "Jahrbücher" for January, 1905, and the "Militär-Wochenblatt," No. 121. Two Infantry Divisions with a strength of 559 officers, 11,139 men, 2,704 horses, 61 guns, and 316 wagons were embarked in 7 hours on 10 transports at Southampton, and in 36 hours arrived off the Essex coast, convoyed by 6 cruisers. The disembarkation was smoothly effected. The 1st Division was landed in 4 hours-5,250 men, 300 horses, 30 guns, and 12 wagons, that is the whole Division, with its Light Baggage only. The men marched well without packs, were trained to drink little water on the march, but were not over well disciplined. Reconnaissance and outpost service left much to be desired. The Cavalry is but Mounted Infantry. The tactical conduct of the fighting was characterised by very early deployment; avoidance of frontal attack, owing to which the attempted envelopment failed, as, not being held in front, the enemy was able to withdraw in good time. The predilection for turning movements led to over-extension, the Divisions, only 8 Battalions strong, covering about 6,000 metres (about 33 miles) of ground.

Japan.-The Field Service Regulations, modelled on the German ones, differ from these in having strong advanced guards of all arms, so that the leader may engage the enemy of his own initiative in independent action. The Main Body therefore follows it at a greater

distance (4 to 5 kilometres) than is allowed in Germany.

Switzerland.-The Swiss Field Service Regulations of 1904 are noticed, and the St. Gothard Manœuvres praised for their practical nature. They are described in the "Militär-Wochenblatt," Nos. 151-152, of 1904.

[†]Reviewed at length in the JOURNAL for July, 1905, p. 874.—E.G.

THE MILITIA AND ITS TRAINING.

By Colonel H. A. WALSH, C.B., late Commanding XXth Regimental District.

JUST at this time the Militia, and its training, must be an interesting subject to all who have the interests of the defences of our country at heart.

There are many and varied opinions, as to the value or otherwise, of our Militia Forces; but there is one thing that is quite certain, and that is, that the Militia in time of need will again, as it has in the past, prove itself a very large and valuable force in case of national danger. If it has done much in the past, it can do more in the future, and with little or no expense it can be made into a much improved fighting machine. The discipline is now such that in a very short time it could be perfected, providing that sanction be given to a proposal referred to later on in this paper. The clothing needs very little to put it into fighting condition. The main drawback which has to be combated and overcome is bad shooting and judging distance.

In the short paper I propose to write on this subject I shall divide into the following headings:—

- 1. The Brigadier.
- 2. The Brigade.
- 3. Training.
- 4. Discipline.
- 5. Musketry.
- 6. Clothing.
- 7. Pay and Accounts.

THE BRIGADIER.

The Brigadier should be carefully chosen. It is no use appointing an officer to command a Militia brigade unless he takes an interest in the Force, and is desirous of advancing it and improving it to the best of his abilities.

The Brigadier should, if possible, have been a Militia Adjutant, and one who thoroughly understands the Militiaman and his ways. Although the Linesman and the Militiaman are actually of exactly the same material, both develop in quite different ways—the Linesman as a soldier, the Militiaman as a civilian. I have had considerable experience of the Militia, having joined the 1st Somerset in 1870, and remained in it till 1874, when I joined the Line. From 1885 to 1890 I was Adjutant of the 3rd Somerset L.I., and in 1903 and 1904

commanded a Militia brigade during its training, and so am able to see the great improvement which has taken place, and still is taking place.

THE BRIGADE.

The brigades should be permanent, and brigade training insisted upon twice in three years at least. The chief advantage in training in brigade is the emulation which naturally arises between battalions, especially in battalions where esprit de corps exists—and it does exist strongly in most Militia battalions—this emulation is a most valuable support to the instruction given during the training. I have noticed that the good points of one battalion are added to those of the others, while the bad points, if observed in one only, yet present in all, soon rapidly disappear altogether.

I recommend 3 battalions as the strength of a brigade, because 3 are quite as many over which the Brigadier can keep a close and careful supervision during the field training, for, as I shall explain hereafter, close supervision by the Brigadier is imperative, and must continue to be so until something has been done to instruct the Militia officers, the permanent staff, and the Militia non-commissioned officers in the practical knowledge of company and battalion field training. Again, the training grounds, except at Aldershot and Salisbury, as a rule are not large enough to admit of the simultaneous training of more than 3 battalions.

To my mind the training in brigade is the most important move that has ever been made for the benefit of the old Constitutional Force, and for its efficiency, except its embodiment during the late South African War. The emulation alone is worth a fortnight's training, whilst the possibilities offered for field work and tactical exercise speak for themselves.

My two years' experience in command of a Militia brigade has clearly shown me what enormous strides have been made for the improvement and better organisation of this important factor of the Army for home defence. Already the Militia of to-day, and 30 years ago, are as different as chalk and cheese.

THE TRAINING.

A Militia battalion must not be expected to start off at once on its assembly like a Line battalion encamped for company and battalion training. We all have to learn to walk before we can run, and to be able to do either properly we must train and practise, or the running and walking muscles will shrink and become useless. The Militiaman has to be taught afresh every year how to walk and run, and he must not be rushed off to company training before he knows something about company drill, i.e., how to walk.

The training might with advantage be divided into four periods as follows:—

For a Battalion.

1st week-Company drill.

2nd week-Company training.

3rd week-Musketry.

4th week-Company and battalion training.

For a Brigade.

1st week-Musketry and machine gun, 1st Battalion.

Company drill and training, 2nd and 3rd Battalions.

2nd week—Musketry and machine gun, 2nd Battalion.

Company drill and training, 1st and 3rd Battal

Company drill and training, 1st and 3rd Battalions. 3rd week—Musketry and machine gun, 3rd Battalion.

Company drill and training, 1st and 2nd Battalions.

4th week—Musketry casuals. Brigade training. Battalion training.

Commanding officers should be left to themselves as much as possible to carry out the first three weeks work; but, at the same time, the Brigadier must exercise a close supervision. His presence with each of his battalions should be constant, but he should interfere only where interference is necessary, his duty being to set a lesson, and see

that it is properly learned.

In training a Militia brigade, many things have to be considered, but to my mind it should be made as simple as possible, and on no account should too much be attempted. A little well learnt and well done is much better than a lot indifferently learnt and badly done. In the Line but little drill is done after it has been thoroughly The drill is to a large extent finished with and field work takes its place. This cannot be so with the Militiaman. never be thoroughly taught his drill, but must begin and learn it again each training. With brigading the tendency is generally to hasten over the steady drill and get on with the field work. This is unsound and wrong, and is teaching men to run before they can walk. The men should be properly drilled, for at least a week-a steady barrack drill (to include skirmishing) — not only for the sake of learning to walk, but also for the sake of discipline. In the proposed scale for a battalion training, I have noted the second week for company training, but if the result of the first week's drill is not satisfactory, I strongly advise a day or two of the second week being given to drill. A few days' good steady barrack-square drill will shake the men into something like order and discipline far sooner than anything else, and the remainder of the training will greatly benefit by it.

The selection of the Adjutant is, in accordance with Regulations, an important and serious duty. Commanding officers are required to report fully their opinion as to the eligibility of candidates (para. 134 K.R.), and so every Adjutant should be thoroughly and in every way qualified for the appointment. Nowadays, when it is necessary to train the Militia for service in the field, are the qualifications laid down in the above-quoted para. sufficient? The Adjutant should possess, in every sense of the word, all the qualifications of the Adjutant of a Line battalion. In many cases, saving perhaps some of the permanent staff, he is the only man who has had any practical experience in the fighting-training of a company or battalion, and so the training of eight separate units falls on his shoulders and those of the permanent staff. No officer should be recommended for this appointment if he does not strictly come up to the requirements referred

to, nor should he be appointed for longer than three years.

There are always a very large number of absentees from training every year, and a large number of these would be avoided if proper care were taken by the recruiting sergeants on enlistment, and again by the approving officers on attestation, by satisfying themselves that the recruit thoroughly understands that if he is a Militiaman all he has to do is to say so, and his enlistment in the Line can be at once carried out. About 10 per cent. of the absentees are accounted for by parents who return notice papers saying their sons have joined the Army. It is quite clear that a little care on the part of the responsible persons would greatly diminish the number annually reported as absent.

DISCIPLINE.

The Militia non-commissioned officer is not, and under present circumstances can hardly be expected to be, a good disciplinarian. For eleven months out of the twelve he is in the same, or possibly a lower, social position than the man over whom he exercises control during the training, and if he makes a man a prisoner and gets him a severe punishment, it may always happen, as it has done, I have no doubt, many thousands of times, over a glass of beer in a public house, when the non-commissioned officer and private have met, the old case is remembered, and it ends in the private paying off old scores and the non-commissioned officer getting a thrashing.

Cannot such a state of things as this be easily remedied by protecting the Militia non-commissioned officer with a special law which would make it a crime of a very serious nature, carrying with it a very severe punishment, for a private of Militia to strike a non-commissioned officer, knowing him to be such? I think such a law would in a very short time have the desired effect, and at any rate it would make very considerable difference in not only the discipline of the Militia, but also in the general improvement of the whole Force. There is no doubt the non-commissioned officer is the weakest point in the Militia organisation. Make him a strong and useful man, and the efficiency of the Militia will have made a great and long stride in the right direction, and I think I have shown how it can be done without any expense to the public.

The company is the fighting unit of the battalion, and once the company is perfect it will take very little to make the battalion perfect also. Now, my experience is—and it must be so with others—that, as the Militia is now, it is quite impossible to train companies properly. Militia company officers as a rule have but little, if any, practical experience of how to put a company through its field training. Some of the permanent staff recently appointed may have some experience, others, from want of practice, are forgetting it, whilst some have forgotten it altogether. In addition, the Militia non-commissioned officer has never heard of such a thing, and has to be taught

from the beginning with the men.

A remedy for this would be to attach the Adjutant and permanent staff to the home battalion in the spring, when the company and battalion training is taking place. This would ensure their being brought up-to-date, and when the Militia non-commissioned officers arrive at the depôt later for a month's preparatory drill before training, they would be instructed in a far more efficient manner than at present obtains. Some of these latter could also be permitted to be attached to a Line battalion. Field work very much more than drill is what these non-commissioned officers require to learn. As matters stand at present the Militia non-commissioned officer is a man of from 2 to 3 years' service, and is before the ordinary Militiaman in intelligence, and soon brushes up the knowledge of drill he had

at the end of the last training. By going through company field training with a Line company, if proper attention is paid to him, he is bound to learn a good deal of the tactical knowledge possessed by the ordinary non-commissioned officer of the Line. He learns to respect himself as they do, he knows what real discipline in the Army is, he learns what it means to take the initiative; and at the end of the course, when he joins his Militia battalion for its training, he will be some good to his captain as an instructor and section commander, and probably a great improvement on the previous year as a

disciplinarian.

Regarding the officers, it is my-it may be fortunate-experience that they are, as a rule, very keen, intelligent, and hardworking. course, there are exceptions to the rule, but I believe the Militia officers only want the chance to become excellent soldiers. officer should be required to get a p,s, by the time he has completed 2 years' service; but I would recommend a slight alteration in the instruction given at the schools for officers of the Auxiliary Forces. At present officers are taught drill, semaphore signalling, scouting, field training, and topography, all in a month. Now, is a month more than sufficient for any officer with ordinary intelligence to properly grasp any one of these subjects, more especially when the tactical subjects are, I believe, only theoretically taught? I do not think so, and if the course cannot be very much extended, the semaphore and topography should be left out and made separate subjects for a further course, as under present conditions the officer's knowledge of these matters must be minute to a degree. It is the old story again of learning to run before you can walk.

The permanent staff should not include colour-sergeants or sergeants. These non-commissioned officers should be posted for a period of 3 years and then rejoin their battalion, as in the case of depôt duty, except that the period is lengthened by a year. I consider this to be a most urgently needed reform, and one which would increase the efficiency of the Militia a hundredfold, and at the same time the experience of the non-commissioned officers them-

selves would be considerably augmented.

MUSKETRY.

The Brigadier is responsible for the musketry training of his brigade, just as much as he is for the discipline and the field training. The musketry training is the most important part of the Militiaman's education, and is that part in which the Militia officer's interest is the least centred, and I fear it is often neglected in its initial stage at depôts. I do not mean to say for a moment that it is neglected during training, but the interest which is due to it, and which must be given to it, it has not yet got. For the sake of musketry, as well as for the sake of the general training of the Militia, I strongly advocate the training of Militia brigades in musketry by battalions, and Commanding Officers, Majors, and Adjutants must give it their earnest individual attention, and it must be carefully and strictly supervised by the Brigadier. If he shows a keen interest the regimental officers will follow suit, and his constant appearance on the range will be a great encouragement to those very hard-working men, the instructors and colour-sergeant-instructors of musketry.

The shooting of the Militia is very bad, and unless a considerable improvement in this respect is very quickly and permanently made, the efficiency of the Force and its fitness to meet a civilised Army in the field becomes a grave and serious question. Sufficient interest is not taken in this, the most important factor to placing the Force in such a state as will enable it with confidence to meet a European Army.

The one idea of a soldier is to get on service, and how to do it. One thing at any rate that may be depended on is this: that a regiment that cannot shoot cannot fight, and so will stand a very bad chance.

Care of arms, aiming off tripods, and the firing exercise are the foundations of good shooting. They are all rather uninteresting, and consequently neglected. The next step is the Morris tube, and the importance of this step is to a great extent not realised except by those who are closely acquainted with it. If properly organised, carried out, and supervised at the depôts by the Adjutants and sergeant-instructors, the bad and good shots are noted, and I am confident that when the recruits are all exercised together, as they are immediately before the training, it will be found that they average from 30 to 40 points a man better than in former years. Thus a very great help to attain the desired end is actually placed in the hands of the Adjutant and permanent staff, but unfortunately rarely used.

I regard the present musketry course as too long and difficult. The period of training should be extended, or the course cut down and made easier. If the latter, then the reduction should be made from rapid practices. To teach rapid firing before the men have been thoroughly grounded in the deliberate practices is adhering to the old style of learning to run before the art of walking has been acquired. The men must learn the rapid practices, certainly, but it should be left till embodiment, unless the period of training is lengthened.

At present there is no time for repetition, and so instruction is, in reality, not being given; for unless repetition is insisted upon, faults are not being corrected. My experience has always been that, touch the pockets of the Linesman or Militiaman, and it will have a great effect on his work, and I would give a small shooting prize of 2d. per diem during training to marksmen, and 1d. to 1st class shots

Another plan to improve the shooting would be to have a non-training course on much the same lines as that now carried out by Reservists. If this idea were adopted, it would be quite as beneficial, or nearly so, as an extra week's training, and at the same time would not be so expensive. When battalions train in brigade, one battalion might be called up on the Friday before the Monday fixed for the commencement of training, so as to enable it to have two days' preliminary drill and commence shooting on the Monday. This would be a great benefit to the brigade, in that it would give it a clear week's training as a brigade.

CLOTHING.

The clothing is good and sufficient, except that another new shirt and another new pair of socks should be issued to each man instead of the part worn ones as at present. In hot weather, as it generally is at the time when Militia train, it is important that a man should be able to wrinse out his socks at the end of the

day's work, and have them dry to put on in the morning.

One pair of boots is not sufficient for health, cleanliness, or comfort. It is true the Militiaman is issued with a pair of canvas shoe, but he rarely puts them on. He prefers to treasure them up and take them home comparatively new at the end of the training. So far as his life as a soldier is concerned, they are useless, and only thought of as an article which will be handy to him during his work at home for the remainder of the year. The cost of these shoes is 2s., and the cost of a pair of boots 12s. Why not issue to the men one pair of boots and let them, as now, become his property at the end of the training, and instead of canvas shoes, issue a second pair of boots with the understanding that they are to last 6 years, and are not to be blacked? With dubbing they start, and with dubbing they end, and at the termination of the 6th year they ought to be still a fairly good pair of boots. These also to become the property of the man. I think a second pair should also be given to Militia recruits, except that they would be required to last 5 years only.

This question of boots is a most serious and important one. A large number of men, especially in the north, are miners, or mill hands, who, even when wearing the best of boots get sore feet, and are thus unable to march. The marching power of the Militiaman is one of his weakest points, and a point which cannot altogether be remedied, but it can be very greatly strengthened and improved by the issue of a second pair of boots as proposed above, and their treatment with dubbing. The boots should be well soaked in castor oil before being issued, and after training, well dubbed and carefully put away. They should be fitted properly. The men should not have boots flung at them indiscriminately to jump into as they often are. Recruits should be carefully taught at the depôts to look after their boots, socks, and feet, and it should be regarded as quite as necessary for them to be able to do this properly as to be able to

drill and shoot.

The Company officers must look carefully to the fitting of the boot; badly fitting boots should become impossible with good Company

officers.

Let us glance for a moment at a certain Militia battalion on the day of assembly. They arrive independently at the appointed place—the regimental depôt usually—some of them, more or less, under the influence of beer. They hastily get into their clothes, then go over to the canteen in hope of getting more beer. Of course, they find this place shut, and their boots at once begin to pinch. In due course, however, they are ready and march off for their destination for the next 26 days. This is probably some distance away, and so they go by train to the nearest station, which is situated at the foot of a range of hills, up amongst which is the camp some 7 miles off, and to which the battalion must march. After many halts they get into camp; but the casualties have been very great, indeed, quite 40 or 50 per cent. The cause of all this is the new boots, and little else, and the casualties are amongst the men who have trained before and so have new boots. When the recruits marched up a fortnight previous, there was no falling out, as their boots were properly broken in and fitted. This is one of the evils, but not all, for many

men have to be admitted into hospital, and so lose some valuable days' training. Others do not report sick, but hobble about with their sore feet, but they are only putting off the evil hour. Give the men a second pair of boots to last 6 years, and the efficiency of the Militia is at once greatly increased. This illustration is one that actually occurred, and not imaginary.

I have omitted any reference to signalling in the Militia, but a word or two may not be amiss on this point. I consider that each battalion should have a party of signallers, and as no increase of the permanent staff with this object in view would probably be sanctioned, owing to the expense, and as my chief object is to show that the efficiency of the Force can be greatly increased without additional expense, I would train the drummers and buglers as signallers. I take it that in the old days drummers and buglers were chiefly used to sound or beat calls at manœuvres, or in the field; and why, then, should they not now revert to what they were originally intended for, to convey orders or messages, but further than the voice or bugle can carry?

PAY AND ACCOUNTS.

The present system under which the accounts of Militia units are conducted is capable of great improvement, at no cost, and with practically no alteration of existing regulations. The experimental scheme of payment recently drawn up for the payment of soldiers in peace and war can scarcely be applied to Militia units at training, chiefly owing to the Army being paid on a weekly basis, and the Militia on a weekly or daily one. I consider it necessary to pay daily, especially when training in brigade. An embodiment, of course, places the Militia at once on the same footing as the Line, regarding the accounts; but for training, into which so much work has to be crammed in such a short space of time, a far simpler method of accounting for money could easily be introduced. Militia officers cannot reasonably be expected to be experts at accounts, as their experience of them is limited to one month annually; but if each officer could become thoroughly accuainted with a simple, business-like way of paying and settling with his men, it would be a useful addition to his training. At the present it appears to be almost entirely neglected.

The principal stumbling block seems to be the complex forms that are at present in use, and I would substitute the following plan as a far simpler method of payment.

The company officer to keep, 1st, a simple cash account; 2nd, a simple record of payment, answering the double purpose of pay and mess-book and pay list combined.

The second only needs explanation, i.e.:—

For the present A.F., N1493, substitute a revised form to show: -

To be Completed by O.C. Company.

Form 1.-Men's accounts; 3 lines to each name.

Form 2.—Casualties since last training.

Form 3.—Summary of totals and recapitulation of pay.

To be Completed by Paymaster.

Form 4.—Abstract and classification of pay.

Form 5.—Paymaster's ledger account with O.C. Company.

Form 6.—Ration statement.

Let the left-hand column of Form 1 show the Militiaman's total credits for the whole training. By glancing at this the captain can easily see how the man's account stands at any time.

Second Column.—1st line, No. and rank; 2nd, name; 3rd, date

of termination of current engagement.

Third Column.—The daily rate of pay.

Fourth Column.-Number of days' pay charged.

Fifth Column.—Daily payments and final settlements, and total of same.

Sixth Column.—Two or three sub-headings for stoppages and deductions from pay, and totals of same.

Seventh Column .- Rations drawn.

Eighth Column.—Remarks, and casualties affecting pay.

The column total credits to be completed immediately the men join. Subsequent forfeitures can be deducted in the column provided for that purpose, and any promotion can be entered beneath the original total in red ink. After final settlement, complete Form 3, and here the duty of the company officer ends.

Form 2 is intended to be kept up throughout the year as a record of casualties, in order that non-effective men may, as far as possible, be kept out of the "accounts" part of the pay list altogether.

On the dismissal of the battalion, the combined pay list is, together with the company cash-book, handed into the Pay Office, where the account is completed by the paymaster, who completes Form 4 by classifying the pay, etc., and also Forms 5 and 6, on receipt of the necessary information and vouchers. The "fair" copy is then prepared for final transmission to the War Office with the Paymaster's account. Each man can have his accounts read over to him on the day prior to final settlement, and record his signature under his "total credits" as to correctness of the same.

In conclusion, it might be well to add that matters could be further simplified by the issue of a free grocery ration during

training

The column for "number of training bounties" has been purposely omitted from the pay list, as they can be entered in red ink across the face of the form in any space that may be convenient.

In bringing this short paper to a conclusion, I would add a word or two as to the scarcity of officers. This is a serious obstacle to any reform in the Militia, and above all to the making the Force fit for service in the field. 35 or 40 years ago the Militia was a far more popular service with gentlemen than it is at present. The training was eagerly looked forward to by everyone as the great time of the year, and why should this not be the case now? The training has, I think, been taken too seriously, and perhaps a little more hard soldiering has been required from officers than is quite necessary. It has at times been all work and no play. Let the trainings have a modicum of play with plenty of work, and the work will be better done and the service more popular. I do not mean to say that as a general rule the Militia has been worked too hard in the past; but in

some cases it has, to my own knowledge. If the period were increased by another 14 days, things could be taken a little easier, and still ensure efficiency being maintained. When the period of training was fixed, which was, I imagine, much about the same time as was the pay of the officers, circumstances were very different. The battalions were, up to the last 20 years, only expected to drill and do a little musketry. Nowadays they are expected to become a tactical fighting machine, as well as a well-drilled body of men, and they have only exactly the same time to do this in.

In time of war—as for example the late South African campaign—country gentlemen were, I suppose in hundreds, clamouring to go out and fight, and were, I suppose, declined as officers on account of having no military experience or qualifications, whereas had they held commissions in the Militia they would have had no difficulty.

Something must be done to make the Service more popular, both for officers and men. Fill the ranks, train in brigade, improve the Militia non-commissioned officer, improve the shooting, and generally popularise the Force, and in a very short time after embodiment the Militia of Great Britain will be in a position to prove itself a pasty foe in face of any European Army.

THE MORAL OF TROOPS.

By M. le Général DE NÉGRIER.

Translated by permission from the Revue des Deux Mondes.

LONG periods of peace often make us lose sight of certain essential principles of organisation, the necessity for which only shows itself clearly during war; of this kind are those affecting the cohesion

and moral force of troops.

The discussions on the new law relating to Military Service afford a proof of this. Morever, it could not be otherwise. The destructive forces not manifesting themselves in peace-time, we are habituated to see in the regiment which is taking part in the Grand Manœuvres, strengthened by a portion of its reservists, a faithful image of what it will be in the field. This is a most fatal delusion, of which it is necessary to explain the dangers. The pretension that troops can be improvised has already brought about the ruin of many nations; this error may lead ours to its destruction. The greater number of those who know nothing of war except by study, not unfrequently believe that if the country can dispose of citizens perfectly trained, well armed, and determined to fight, regiments can be formed at the moment of need. There could not be a greater mistake. A body of men can only stand the wear and tear of war if all its component parts know each other, know their leaders, and are known to them. Otherwise, it is a mob. It might appear enthusiastic and superb at the farewell inspection; it will be without moral, and will lamentably fail at the first moments of trial. Quite recently even we have seen this actually occur. In 1895, the 200th Regiment was formed for the Madagascar Expedition—it was composed of trained and hardy Volunteers, selected almost entirely from a considerable number of applicants. Its cadres, officers, and non-commissioned officers were an exceptionally fine body of men. But they did not individually know one another; moral did not exist; it could not exist; and some weeks after its landing, the regiment had perished. We need not dwell on this painful proof of our errors of organisation. Those who will not be convinced have only to consult the Archives of the 200th Regiment of Infantry. To raise an Army, altogether through the calling out of reservists, implies a complete want of knowledge of the laws which govern moral forces, without which there is no Army. To make this truth known is the object of this study. When the evil is recognised, the remedy can also be found.

There is a general agreement that the value of a body of troops depends essentially on its moral. It may even serve to close discussions of strategical or tactical order, because history often records the worst combinations as traits of genius, when the superior moral of the combatants has made them successful. But what is the moral

of a body of troops? What is its essence? Can it be created at will? How can it be maintained? How developed? To listen to most of those who speak and write about it, it would seem possible to give moral to a body of men as military instruction is given; and, hence, there are numerous people ready to hold the chiefs responsible, in all circumstances, for the moral of the men under their orders. With an Army of old soldiers, who have been kept in hand for a long time, this point of view would be partly justified; but can the leaders of an Army in the main composed of reservists be held equally responsible? How can officers be held responsible for the moral of men, whom they have to lead under fire at the beginning of a campaign, whom they have barely seen, of whose names, characters, and qualities they know nothing, and to whom they are themselves unknown?

But, in our Army, the reservists constitute the principal mass of the field troops. They pass without transition and without delay from their situations in time of peace to the roughest ordeals of war. Necessarily they bring with them to the regiments the spirit animating them at the moment of mobilisation. It would, to begin with, then be indispensable that the nation should only place at the disposal of the "cadres" men with stout hearts, penetrated with the sentiment of duty up to the limit of self-denial, and ready at any

moment to follow their leaders blindly.

This point of view raises some serious questions, the study of which, however, we seem to have intentionally neglected; for, as a matter of fact, they are inconvenient, because they touch on political organisation. Nevertheless, having failed to create in advance in the nation the indispensable moral condition, it is necessary to realise that all the sacrifices, acquiesced in during the last thirty years, down to the present day, might be lost. The social revolution, which is preparing, and in the midst of which we are already living, renders the problem a most disquieting one. It is assuredly too complex to be disposed of in a few pages. In those which follow we propose only to show that our military system, combined with the two years' service, the result of successive changes imposed by the political situation, is neither in consonance with the moral nor

economic situation of the nation.

The moral of troops depends upon their determination to win at all costs, upon their confidence in themselves and their leaders. It depends also on their physical condition. The determination to conquer is produced by patriotism, and is the result of a long moral education, founded on race traditions, and which finds in the depth of the hereditary instinct a favourable soil for its cultivation. By this education alone can confidence be improvised. It can only be acquired by a life spent in common for a certain time. In such a case soldiers and leaders know each other, esteem each other, and, passing through the same perils or the same vicissitudes, they understand and are ready to devote themselves to each other. These conditions can only be completly realised by troops always maintained nearly on a war footing, as is the case with the Algerian Rifles and the Foreign Legion; further, not more than a quarter of the combatant ranks should be renewed annually. In addition (the cadres, the result of a careful system of selection, being excepted), the proportion of elderly soldiers in the ranks ought to be very small. However beautiful may be the legend which surrounds old warriors with

an aureole, it must be remembered that they are not of more value than young ones under fire, as soon as the latter, after proper

training, have had time to be morally won by their leaders.

The soldier of from twenty-two to twenty-five years of age is the best. He is still enthusiastic, hardy, and of light-hearted temperament. He is in full vigour, and offers the maximum of resistance to fatigue as to disease. When older, his critical sense develops, the monotony of military service discourages him. He acquires bad habits and often bad morals. He devotes himself with more difficulty, and hard work is a greater strain on his moral. This last point is very important because fatigue tends to lower the moral of troops to a degree that officers, who have never made a campaign,

scarcely suspect.

It is essential, too, to commence the war only with troops which have been thoroughly trained. With the system of Armies principally brought up to fighting strength by calling out the Reserves, this desideratum is evidently very difficult to realise. Up to the present we have not taken this principle into account. Here is a proof of it. A company of infantry, one hundred and twenty strong taken haphazard, at the moment of a spring mobilisation exercise (consequently under the most favourable conditions for us) is divided, as follows: - Half are drawn from the recruits of the year, the other two-quarters are composed of men of the two other classes (Law of 1889). We have then 56 recruits and 27 or 28 soldiers drawn from the preceding classes. In reality the officers have at their disposal only 55 completely trained soldiers, who are known to their leaders (under the two-years' regulations this proportion will become less); the others have not completed their training. It is under these conditions that, at the moment of mobilisation, the company is completed by 130 reservists, who, for the most part, have never served in the corps before, and are consequently completely unknown. The character notes marked on their discharges give but vague Moreover, after his release from military service, a man changes. It is only then that he begins to struggle with the difficulties of life. It is the moment when he is ready to accept revolutionary ideas which profess to offer him a remedy for his evils. His moral is modified; and as to the physical aptitude, it disappears completely. These two points are so important that it is well to examine them separately

The development of the theories of International Brotherhood, behind which cowardice shelters itself, is a fact which is unfortunately indisputable. When war shall surprise the nation lulled to sleep in its prosperity, it will probably not be to the patriotic refrains of 1792 that the columns of reservists will form up, but rather with the chant of the *Internationale*. The agents scattered by foreigners among our soldiers will know how, in case of need, to incite it. The masses of the working classes, at present kept by politics in a constant state of excitement, will fill the regiments with their agitation, and will scatter broadcast the distrust of all authorities that the revolutionary leaders ceaselessly endeavour to inspire. A by no means unimportant fraction of the reservists will be imbued with the teaching given to the working masses in the socialist gatherings, and of

which we give a résumé:-

"Life is the greatest blessing of this world. The instinct of its preservation is a natural law. Everything ought to be done to

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preserve life. The first duty a free man owes to himself, having a conscience of his own, is to safe-guard his own life, then to attain prosperity. The masses of the Proletariat ought to be aware of the injustice of their economic position. They are, in fact, reduced to a state of slavery and exploited by capitalists, since they always receive wages inferior in value to what they create. To maintain the Proletariat in this slavery Capital has had from all time resource to two fictions, viz.: religion and patriotism, which last is itself a kind of religion. For purposes of imposition these two fictions have at their disposal two forces: the Army and the Clergy. Everyone who wishes to live a life of freedom should labour to destroy these two forces. Every war, above all one waged in the name of economic interests, is impious. It is always to the interest of Capital to send the Proletariat to death in order to defend the interests of the rich. Every military chief is the immediate representative of Capital, he is the first of the enemies. The Proletariat must remember this on the day they are called on to join the colours.'

These detestable lessons are more dangerous than one can express, because they seek support by an appeal to human weakness and give, not only an excuse, but even an appearance of right to the worst form of decadence; and it is only too easy to see what the

consequences may be.

We are surmising the moral state of perhaps an important portion of the elements that the cadres are likely to have to take under fire before there has been time to inspire them with confidence and devotion. Assuredly, if the officers had some weeks to spare before taking the reservists into action, there is not doubt but that the sentiment of honour and bravery, which exists at the bottom of the heart of our race, would gain the upper hand. Unfortunately, our present organisation will not permit it. As soon as called out, the reservists will be entrained and sent to the front. These are the very worst conditions. Fortunately for them, neither the Russians nor the Japanese suffered from them. Before the first battles, the two belligerents had had more than two and a half months to put their troops in movement; less favoured, we shall only have a few

days, passed in a state of great excitement. We must then anticipate that—as far as moral is concerned the first steps of mobilisation will be undertaken with some difficulty. At the present moment, in the middle of peace, the revolutionary leaders will certainly treat these considerations as calumnious imputations. They do not venture as yet to make a display of their hatred of patriotism, and, according to them, no one has any right to assume that the "comrades" will rejoin their regiments with their minds demoralised. Supposing that is so; let us admit that all the reservists arrive with their moral perfect, with the firm determination to conquer or die. Will this be sufficient? Shall we then have the sterling troops that we wish to organise? Our cadres are excellent, that is understood. But the reservists? How will they be able to stand the fatigues without any preliminary training? cannot have any. And we find ourselves confronted with that brutal law: "Great fatigue acts disastrously on the moral forces." elucidation is necessary here.

In our day, the population of the towns increase to the detriment of the country. From the military point of view this is to be regretted, because it is the rural populations which, from times immemorial, have provided Armies with their best fighting men. Life in towns and in manufacturing establishments has the effect of diminishing physical aptitude for service in war. This truth needs no demonstration. Look at the artisans and the workmen employed in every branch of trade. In civil life they never march, and have never anything to carry on their backs. They nourish themselves in their own way, and eat when they feel hungry. Suddenly, without any period of transition, they are called upon to undergo very severe physical trials, fatigues, inclemency of weather, privations. Let us recall what took place in 1870, when our regiments were completed by reservists. The Medical Inspector, Kelsch, reported that twenty days in the field was sufficient to eliminate two-fifths of the effectives of the army corps, and this before the troops had been once in action.

Let us then proclaim aloud: The want of training for field troops produces the most disastrous results, no matter how good their will may be. Fatigue engenders in the organism, during the entire period of work, some waste of matter, some scorie, that is to say, of a poisonous nature. Modern chemistry has isolated some of these substances, and has named them "Leucomaines," and determined their noxious properties. In the normal state they are destroyed by means of the oxygen in the blood, destroyed in the liver or eliminated by the kidneys. Under great fatigue, when their quantity exceeds the physiological limit, the man is poisoned and depressed. There we find most often the origin of the epidemics which have suddenly appeared among troops in the field, such as, typhoid, typhus, smallpox, dengue fever, etc.

It must be remembered that industrial work, like work in the fields, exercises chiefly the arms; and, moreover, in proportion as civilisation develops, the aptitude for walking diminishes. But it is precisely on this aptitude that war makes an immediate demand. This only applies to infantry, one may be told; the cavalry soldier and artilleryman have no need of training. This is a mistake. But let us only consider the question of the infantry, since the moral of

an Army is always that of its infantry.

Fatigue produces general disorders. The exhaustion of the body does not increase in direct proportion to effective work. It has been physiologically demonstrated that work effected by muscles already fatigued acts in a more deleterious manner than much heavier work accomplished under normal conditions. Thus, with a body of men already fatigued, it is sufficient to require from them a new effort to annihilate for a time, sometimes for a considerable length of time, a very considerable portion of its effective. All leaders who have lived with their men are acquainted with this principle. In watching their troops march past and examining their countenances, they can tell what amount of physical and moral energy is remaining, and what demands they can still make upon them. The march of the soldier carrying his equipment requires a considerable expenditure of strength. It is the hardest work of all, and in which excess of fatigue is often suddenly produced. We know, on the other hand, that the organism is most strained by work when it is already tired out. The muscles are then compelled, in order to perform new work, to make a call on their reserve of force, and the nervous system in these conditions must play a more active part. Then the muscular force rapidly weakening, causes internal sensations of fatigue, the diminution of excitability brings with it lassitude, and the collapse

of moral follows. Officers who have taken part in the operations in Algeria know that soldiers sometimes commit suicide, the fatigue resulting from marching becoming insupportable. From that period to the moment of action, when rapid movements, necessitated by the exigencies of battle, have to be made by the troops under fire, what energy can be expected from an exhausted soldier? Yet it is on the moral of these masses of reservists out of training that we have

to depend.

In the actual state of our Army, under penalty of disorganising morally and materially the mobilised regiments, the generals must, in the first weeks of a campaign, regulate their operations by the feeble capacity of resistance of this mass of reservists, and thus deprive themselves of one of the most powerful forces in war: the power of movement. They cannot dream of it. How take the time for gradually training their regiments? Events are stronger than their wills. Public opinion, kept on the alert by the Press, would not fail to demand the immediate supersession of a leader whose operations took count of such considerations. One will then be compelled to apply to these masses the methods adopted for troops in time of peace. But, we shall be told, do not the Autumn Manœuvres prove that the reservists stand as well as possible the fatigues of campaign To believe that it would be the same in time of war is a dangerous illusion. During the Autumn Manœuvres troops are far from undergoing the privations and fatigues of war, the men are not loaded, they have neither cartridges nor provisions, nor spare things. The effectives are weak, the marches are therefore easy, without unexpected action or exciting and fatiguing incidents. They act at ease. The cantonments give good shelter; to bivouac out in the rain and without rations is rare. With regard to food, the soldiers, even the poor ones, have some money, and everywhere purchase some additions to their daily ration, whilst during war the rations are often reduced. Moreover, the short duration of the exercises sustains their moral, and finally they rest every three or four days. In short, the manœuvres teach nothing as to the powers of resistance of the reservists, and we must recognise that these powers of resistance are weakest when there has been no time to train men methodically.

With the present organisation, or that which the two years' law proposes, we must expect, then, to commence war with troops whose moral will be easily depressed, no matter how great may be

their desire to fight well.

Further, it must not be lost sight of that night operations will become very frequent. To carry these out successfully, great cohesion and a very high moral are necessary. These conditions only exist in troops which all know each other, and this is not the case when a regiment is more than doubled by the arrival of reservists. It must also be remembered that a great number of them live in towns. Among these, how many are there who have never been out in the country at night time? The obscurity, the isolation trouble them, funk often lays hold of them. It is to these reasons that one must look for the origin of most of these so-called attacks on powder magazines, which regularly repeat themselves at times when recruits are taking their turn on guard. The powder magazines are necessarily at a distance from dwellings. The sentry, who is not yet accustomed to the darkness, quickly becomes nervous. He hears strange noises,

unknown to him, which are customary at night in the country; branches of trees which break off, the rustling of an animal in the bushes, the moaning of the wind in the trees, the noise of the wings of a flight of migratory birds. The bush seen a moment ago at a distance appears to have moved. An object at first unperceived is noticed; a ray of moonlight falls across it, and it seems to stir. It is some one! "Qui vive?" cries the sentry, gets frightened, and fires. The picket hastens up, and the soldier swears that he has seen some prowhers creeping round him. An enquiry is ordered, naturally without result. The commanding officer takes note of the incident, and, as the soldier speaks in good faith, appears to believe him, so as not to have to punish him.

For similar reasons, do we not know that when the sentry is inexperienced, the rounds and patrols, in order to avoid being fired at, have to take care to notify their approach by a preconcerted

signal?

At the moment of entering on a campaign, the conditions requisite for night operations do not exist with reservists, because, as we have said, it is necessary that soldiers should know each other. In the obscurity of the night discipline is only maintained by means of this condition, and, further, if this condition does not exist, the troop is exposed to be struck by panic. It has in effect all the characteristics of crowds, since the individuals composing it are strangers to each other, and are, nevertheless, in close contact. We know that in crowds people exercise on each other an unconscious and reflex action, the effect of which is to diminish freewill, intelligence, and reasoning power, whilst the instinct which dwells at the bottom of each of us, develops. "Every entity tends to persevere in his own entity," said Spinoza. In case of danger, the instinct of self-preservation urges the individual to flight. In a crowd each individual has a tendency to yield to his instincts without being aware of it, to the point of often forgetting his real sentiments. It is then that a crowd passes suddenly from calm to fury, gives itself over suddenly to the committal of atrocities that none of the individuals composing it would imagine without horror; or again to some excesses which afterwards excites the indignation of those which have committed them. This psychological state of crowds can bring about panic and confusion with extreme rapidity. Should any cause whatever produce a feeling of danger, imaginary or real, if something unexpected happens, surprises, or simply astonishes it, its instinct has free rein and will almost always urge it into flight. is sufficient at this moment that some persons should be affected and seized with panic, for the whole crowd, with the rapidity of thought, to participate in that panic, and fall into the most complete unconsciousness of its acts. The decisive effect is then produced, viz.: panic, a state in which the individual, having lost his freewill and not knowing what he is doing, imitates desperately whatever his neighbour does. This phenomenon is one of the most contagious, and one has often seen men known for their bravery let themselves be carried away by it. When panic breaks loose, it becomes impossible to restrain it. All efforts are vain. The most energetic exhaust Resistance, whatever there may be, is swept away. Rifle fire, artillery even, are incapable of arresting the frenzied movement of a crowd in this state. These are well known facts, and it is clear that regiments, the bulk of which are composed of men

coming from all quarters and unknown to each other, form a crowd

and are liable to the dangers incidental to one.

To this optimists reply that in this respect Germany is in a similar situation. Those who have not studied the organisation of our neighbours, fancy that their military institutions are the same as our own. It is an absolute error. The Army to bear the first brunt is made up only of the most recent classes. It is even possible that the forces, destined to make a sudden irruption into our territory, do not contain any reservists. Here is a proof of it: the infantry battalion on the frontier has an effective of 640 combatants. When a man goes he is replaced by the "Uberzahlige" (men in excess of the recruitment). For another thing, we must not forget that the recruiting is territorial; then in calling out the available class (3rd class of the infantry), say 267 men per battalion, the effective is raised to 907 men. These men return to their companies to take the place that they have recently left. They are still trained and have forgotten nothing; the cadres know them, and as they have just passed two years with them, the cohesion is complete. One sees then that in this essential point our organisation has nothing in common with that of Germany. The legislators, haunted by the folly of numbers, not having lived in the ranks, do not understand this necessity. They fancy that in bringing together 3,000 trained men, and in giving them the same uniform, they will have formed a

They express it by saying:—"If we are victorious in the first battle all will go well." They have an intuition that the necessary preliminary moral force does not exist, and that victory alone can produce it. Is it then arguable that our organisation does not lay us open to an initial check? This will be all the more deplorable, as, being resolved not to declare war, we shall be obliged, at the commencement, to remain on the defensive. It is admitted that we shall only make war if we are attacked. The enemy then has the initiative of attack. He will be, consequently, master of the hour; he can prepare his methods of advance, gain time, and surprise us. Is it not wise to anticipate that the initial successes will be on his

side?

Let us recognise it. We are very badly prepared for this eventuality, and the two years' service renders some special dispositions absolutely necessary, which must find their place in new regulations for the cadres.

(To be continued.)

JAPANESE SOLDIER'S POCKET LEDGER.

Communicated by the General Staff.

THE following is a free translation of the contents of the Japanese soldier's pocket ledger. They consist of two Imperial Edicts followed by headings regarding pay, etc.

IMPERIAL EDICT.

(Dated 28th year of Meiji, 5th month, 13th day, i.e., 13th May, 1895.)

These are the Emperor's words to His well-beloved soldiers: In the year 1882, during the process of organisation of Our Army, we desired Our soldiers to keep in mind the following virtues, viz.:—Loyalty, courtesy, bravery, uprightness, and modesty. Since Our edict was issued, ten years of peace prevailed until the war with China broke out. In that war, Our soldiers, enduring the trials of heat and cold, preserved the integrity of Our Empire. By their valour the war was brought to a successful termination, and their deeds of valour became known throughout the world. As He foresaw, His Majesty is pleased to observe that His soldiers have kept in mind the five virtues heretofore mentioned, and have obeyed orders without a murmur, and gladly sacrificed their lives for the public weal. His Majesty's heart has been rejoiced at the manner in which His soldiers have proved that they are His most obedient servants. Yet He cannot but regret and feel sorrow for those who lost their lives in battle, who perished from disease, or through wounds have become deformed. These latter and the affliction that has befallen them shall never be forgotten by His Majesty. His Majesty, having now signed a treaty of peace with China, will enjoy with His soldiers the benefits thereof; but it must not be forgotten that even in times of peace the necessity of maintaining the honour of Japan and that of the Army entails a heavy burden upon the troops. Although His Majesty is pleased at receiving honour through the victories of His soldiers, He must impress upon them that the future of the Empire is immeasurable, and He therefore bids them, whether they remain with the Army or return to their homes, ever to keep in memory and improve themselves in the five aforementioned virtues.

IMPERIAL EDICT.

For over 2,500 years Emperors have commanded the troops of Japan, and, during this long period, many changes have taken place in the Army. At the earliest period of our history, the Emperor usually commanded in person, and at other times delegated His authority to the Empress or Crown Prince, but never to a subject. In the next period, about the middle of our national history, Chinese

methods were adopted, the country was sub-divided for purposes of government, and the troops were separated into nine classes. soldier now became distinct from the tiller of the soil, and the bushi or military caste was formed. The command now became centred in the hands of a few chiefs of this caste, while frequent collisions occurred between them, causing constant disturbances to prevail in the Empire. Gradually political power was seized by these chiefs. For 700 years this unfortunate state of affairs continued, a state which, in the present day, when the Empire is established upon so sure a footing, it is difficult to realise. As time went on, the power of the Shogun greatly diminished, the pressure of foreign Powers increased, and the general condition was most displeasing to the Grandfather and Father of His Majesty the present Emperor. When His Majesty came to the throne, the Shogun was the practical ruler of the country, and still retained his authority over the Army. Thanks, however, to the loyalty of the Emperor's subjects, this anomalous state has been terminated, and His Majesty is now the real as well as the titular ruler of the Empire. During the past fifteen years, the organisation of the Army and Navy 1 has been undertaken, and is now approaching completion. His Majesty declares that He is the Head of the Army, and that although other chiefs may be appointed, they are His subjects and are trusted as faithful servants. His Majesty believes that such a condition of affairs as prevailed in Japan in the middle ages can The present Emperor is the Grand-Marshal, and you, never recur. His soldiers, must ever regard Him with filial affection, His Majesty at the same time looking upon you as His sons. Your loyalty and faithfulness to duty are the sole basis upon which the security of If the Empire prospers, you will His Majesty's reign depends. rejoice with His Majesty, and if it decays you will be sharers in His sorrow. Thus His Majesty's mind and your minds are alike, equally desiring the welfare of the Empire, and while hailing the present prospect of peace, yet prepared to defend the Empire and add lustre to the glorious deeds of your ancestors.

His Majesty, placing full trust in you, bids you to keep in mind

and put in practice the following maxims:-

1. The first of these maxims or virtues is loyalty. Every inhabitant of Japan is rejoiced to perform an act which will benefit his country; but a soldier who has no such desire is of no value. Be he expert in war and skilful in his profession, such qualities will avail nothing, without loyalty. A corps composed of such men, though pleasing to the eye, would be, in an engagement with the enemy, no better than a mob. Upon the loyalty of the troops depend the safeguarding of the rights and the prosperity of the country. No soldier is permitted to meddle with political or social matters, for his duty is before all else to be loyal. Soldiers! Preserve your name from dishonour, and distinguish yourselves by uprightness.

2. Courtesy. From the Marshal to the private there exist ranks and orders. Orders from seniors must be obeyed, and such orders are to be regarded as the Emperor's orders. Courtesy must be paid to seniors in all arms of the service. Ordinary intercourse is permitted between seniors and juniors, and they should treat each other as brothers; but when there is a question of duty, orders must be rigidly

¹ In these edicts the Navy is mentioned equally with the Army.

and strictly obeyed. Without courtesy there is no difference between seni rs and juniors. No person will have respect for those above or consider those below him, and harmony will cease to exist in the Army. Whoever brings about such a state of affairs is an enemy, not only of

the Army but of the country.

3. Bravery. From the earliest days of our history the highest respect has always been paid to bravery, and as soldiers have to meet the enemies of the country for its protection, bravery must not be forgotten for a moment. There are two kinds of bravery, one kind actuated by rashness and folly, the other by thought. Soldiers must think before acting, neither despising an inferior enemy nor fearing a powerful one, and by so doing, they will display the higher kind of bravery. In intercourse with other men be civil and earn their approbation for your actions, and, above all, give no one reason to look upon you as a brute beast.

4. Uprightness is another virtue. Without this no body of troops can have a lasting existence. Be a man of your word, and before promising anything consider first your power to perform it, lest you find yourself in such a position that you fail to keep your word. In the past some have given their word rashly and without fully understanding what was required of them, and, in endeavouring to fulfil the part they have accepted, have brought ruin upon themselves.

5. Immorality. This vice makes men become feeble in spirit, careless of their promises, extravagant, selfish and unworthy of the position of soldiers. Men at large will withhold praise from them when they perform meritorious acts. Bad habits contracted by soldiers spread like an epidemic, and lower the spirit of the Army. His Majesty greatly dreads the effect of evil habits, and has for this reason proclaimed a law for the punishment of vice, and the more His Majesty thinks upon this subject the more He feels anxious.

The above article must not be read carelessly.

The preceding five articles embody the spirit which must imbue Our soldiers and fill the hearts of the whole Army, for unless the heart be true the articles are of themselves of no value. Therefore, His Majesty's happiness, and that of His subjects, depends upon His wishes being borne in mind and carried out with an honest heart.

4th January, 1882.

ARTICLES FOR THE SOLDIER.

Armies were established to add glory to the Imperial Authority, and protect the homes of the inhabitants of Japan. Every soldier must therefore obey and keep in mind the following articles:—

1. You must not act in a disloyal or unfaithful manner, but

must preserve a true and upright heart.

2. You must never act in a brutal manner, but behave in an honourable manner towards your inferiors, and respectfully towards your superiors.

3. You must obey orders, no matter their nature or how difficult

they may be to perform.

4. You must never show cowardice, but behave with courage, and be diligent in the performance of duty.

5. You must never merit the contempt of anyone by careless conduct, or by quarrelling with your fellow soldiers.

6. You must not be extravagant, and must endeavour to the utmost to be virtuous and modest.

7. You must exercise self-control, and be honourable and un-

selfish towards your fellow soldiers.

Besides the above, you must remember that you are under the laws of your country, and must be careful not to break them, a misfortune which would bring discredit upon yourself and your predecessors. Should you ever become amenable to criminal law recollect that you thereby forfeit your rights and honours, and are no more a genuine subject of the Empire. Moreover, you are under military law, which punishes all kinds of offences against military authority, and is in consequence the severest tribunal of all. A law-breaker is not only despised by the world at large, but besmirches the honour of the troops with whom he serves. Consider, therefore, the consequence of illegal acts.

Oath

I hereby declare that I have read the articles for soldiers, and will sacredly keep them and commit no offence.

Date.

Signature of Soldier.

POCKET LEDGERS AND HOW THEY ARE TO BE DEALT WITH.

1. Pocket ledgers must be handled with care, because they contain His Majesty's edicts, articles for soldiers, oath, history of the owner, and other matters regarding him. Issues of money, equipment, etc., are entered in the pocket ledger. This is done at the time of transfer from one unit to another, or when detached, to prove that such issue has been made, and what has been taken to the other unit.

2. If the owner finds that his history, as stated in the pocket ledger, or the entries in it of issues do not agree with facts, he will

report the matter without delay.

3. The owner is responsible for the care of his pocket ledger, and of articles issued by his unit. Damage or loss of these articles will be charged against the owner, and he will be punished.

4. Before leaving the Army when time-expired, or before removing to another unit, etc., the owner must apply to have the necessary entries made in his pocket ledger up to the date of his departure.

5. At the time of mobilisation, or when called up for annual training, the pocket ledger will be carried and produced for inspection.

6. Should a soldier of the reserve lose or damage his pocket ledger, he will inform the local military authority of the loss, and explain the cause of the loss or damage.

 The pocket ledger shall become the property of the holder when he has finished his service in every class of the Army, or wnen

discharged for other reasons.

The pocket ledger contains the usual headings regarding next of kin, age, rank, service, class of service, trade before enlistment, holidays given as a reward, certificates, record on active service, record with the reserve, and record of punishment. Cause of discharge, issues of pay, etc.

NAVAL NOTES.

Home.—The following are the principal appointments which have been made: Vice-Admirals—Sir A. W. Moore, K.C.B., K.C.V.O., C.M.G., to be Commander-in-Chief in China; the Hon. Sir A. G. Curzon-Howe, K.C.B., C.V.O., C.M.G., to be Second-in-Command of the Channel Fleet. Rear-Admirals—R. L. Groome, C.V.O., to be Rear-Admiral in the Channel Fleet; C. H. Cross to Command of Reserve Division, Portsmouth. Captains—J. de M. Hutchinson to "Juno"; E. C. T. Troubridge, C.V.O., C.M.G., to "Glory"; C. A. G. Calthorpe to "Roxburgh"; R. H. Anstruther to "Sirius"; A. D. Ricardo to "Empress of India"; E. S. Fitzherbert to "Albemarle."

The first-class protected cruiser "Powerful," flying the flag of Vice-Admiral Sir W. H. Fawkes, K.C.V.O., left Portsmouth on the 17th ult. for the Australian station, where she relieves the first-class armoured cruiser "Euryalus" as flag-ship.

The first-class battle-ship "Glory" was raised to full complement at Portsmouth on the 24th ult. for service in the Channel Fleet. The first-class battle-ship "Montagu," belonging to the Channel Fleet, paid off at Devonport on the 30th ult., recommissioning the following day for a further term of service with the fleet.

The first-class armoured cruiser "Donegal" paid off at Devonport on the 30th ult. from First Cruiser Squadron, her place having been taken by the first-class armoured cruiser "Devonshire."

The second-class cruiser "Cambrian" arrived at Haulbowline on the 3rd ult. for service on the Australian station, and left Plymouth on the 14th ult. for her destination. The second class cruiser "Sirius" arrived at Devonport on the 7th ult. from China, and paid off on the 20th ult. at that port.

Stranding of the "Assistance."—The new repair-ship "Assistance," attached to the Atlantic Fleet, went ashore in Tetuan Bay on the 12th ult. Salvage operations have been much delayed by the bad weather, and the ship has not yet been floated.

Steam Trials.—The new second-class cruiser "Encounter" has been completing her trials. At the thirty hours' one-fifth power steam trial the following results were obtained:—Steam at starboard engine, 184 lbs. per square inch, port engine, 184 lbs. per square inch; revolutions per minute: starboard engine, 105·1; port engine, 105·3; I.H.P. per hour: starboard engine 1,336; port engine, 1,261; total, 2,597; coal consumption per I.H.P. per hour, 1·98 lbs.; speed by log, 13·0 knots; on measured mile, 13·15.knots. At the thirty hours trial at 70 per cent. of full power the results were:—Steam pressure at boilers, 227 lbs. per square inch; steam pressure at engines, 210 lbs. per square inch; vacuum, 26·0; revolutions per minute

(mean), 159½; I.H.P. per hour, 9,008; speed, 19 knots; coal consumption per I.H.P. per hour, 1.98 lbs. At the eight hours' full-power trial the following results were obtained:—Steam pressure at boilers, 230 lbs. per square inch; steam pressure at engines, 218 lbs. per square inch; vacuum, 25.3; revolutions per minute, 178; I.H.P. per hour, 13,006; speed, 21.1 knots; coal consumption per I.H.P. for all purposes, 2.09 lbs.

France.—The following are the principal promotions and appointments which have been made: Capitaines de Vaisseau — A. A. Tracon to "Guichen"; L. Passerat de Silans to "Redoutable." Capitaines de Frégate—A. A. Tracon, P. L. P. Déjean to be Capitaines de Vaisseau.

The first-class armoured cruiser "Amiral Aube" is to be transferred from the Northern Squadron to the Mediterranean Fleet, where she takes the place of the "Désaix," one of the small class of armoured cruisers, which is to be the new flag-ship of the Atlantic Division. The armoured cruiser division in the Mediterranean will now be quite homogeneous, consisting as it will of the three sister-ships, "Marseillaise," "Condé," and "Amiral Aube." The place of the "Amiral Aube" in the Northern Squadron is to be taken by the new first-class armoured cruiser "Jules Ferry," a considerably larger and more powerful vessel, a sister-ship to the "Léon Gambetta," already attached to the squadron.

Motive Power in Submarines.—It is stated that after making use for some years in submarines and submersibles of benzine and other motors à explosion for movement on the surface, a return may be made to steam engines, such as were used in the submarine "Narval," built ten years ago. Further experiments are, however, being carried on with the view of discovering a more satisfactory motor than that à explosion, but if none are forthcoming it is considered certain a return will be made to steam.

The Naval Estimates for 1906.—Précis of Explanatory Memo. by the Minister of Marine:—"The proposed Estimates for 1906 show an increase of 6,338,969 francs (£253,558 17s.) over those of the present year.

"Conformably to the engagement given to Parliament during the discussion on the preceding budget, there is no increase in the amount of the total expenditure on new constructions. In the present Estimates account is taken of the destroyers and large submersibles, which are being laid down during the present year in accordance with the new programme sanctioned by the Superior Council of the Navy. They also take into account the division of three battle-ships, also forming part of the new programme, which are to be laid down at the beginning of 1906, of ten additional destroyers, and twenty submersibles.

The Naval Programme.

"The raison d'être of a naval programme is to materialise under a concrete form the governing ideas on which it is hoped the future organisation of the fleet will be carried through. As the conditions of establishment and utilisation of a fleet are essentially open to improvement, as the situation of the country itself is subject to some modifications, it is not possible to lay down ne varietur a plan of constructions covering a long period of time; every programme must be subject to a periodical

revision. But each time that an important group of new units is laid down it is necessary to make certain that those units conform to the general plan of the fleet which has been drawn up, and that they are

those most needed at the time.

"Since November, 1899, there has been no revision of the naval programme as a whole, and we have been content to complete the units, the immediate necessity for which had been then recognised and the construction of which had been sanctioned by Parliament by the special Bill of 1900. The Superior Council of the Navy, which sat between the 10th and 15th of last May, has pronounced in favour of the following constitution of our naval forces, which has been drawn up with a due regard to the financial resources of the country and the strength of the personnel so as to maintain at almost the present limits the expenditure demanded from the country:—

Five squadrons of six battle-ships each, with four units in reserve; that is, thirty-four battle-ships.

Five divisions of three first-class armoured cruisers each, with three reserve units; that is, eighteen first-class armoured cruisers.

Twelve second-class armoured cruisers for divisions on foreign stations, with six reserve units; that is, eighteen second-class armoured cruisers.

One scout for each squadron, with one in reserve; that is, six squadron-scouts.

A destroyer for each battle-ship, with six for the squadron in the Far East.

Fifty-eight destroyers for torpedo-boat divisions, for submarines, or independent divisions, with fifteen reserve; that is, a total of 109 destroyers.

Forty-nine submarines for defensive purposes.

Eighty-two submarines or submersibles for offensive purposes.

One hundred and sixty-six torpedo-boats.

"Starting from that and taking into account ships already built or in course of construction, and deducting those which will soon be condemned as obsolete, we shall have to build between now and 1919:—

Eleven battle-ships; ten first-class armoured cruisers; six secondclass armoured cruisers; six scouts; sixty-six destroyers; eighteen defensive submarines; seventy-two offensive submarines; and fifty torpedo-boats.

"A first estimate shows that if these units are completed on the designs which at present seem the best, between now and 1919 an annual sum of 121 million francs (£4,840,000) for new constructions will have to be provided. There is nothing chimerical in the realisation of this programme, and it may be taken as the point of departure in determining the units to be laid down in the coming years. This granted, the question remains, what units are most required, for the laying down of which the authority of Parliament should be obtained?

"In regard to ships of large tonnage, we must avoid laying down a large number at one time. If during the thirteen years for which provision has been made, and during which we have to produce 27 large ships, the delivery is regular, taking the time of construction at four years, we ought to lay down three units during each of the nine first years. Taking into consideration the capacity of the building yards and the money assigned, it is possible to lay down three in 1906 and

three more in 1907, as well as some ten destroyers and some twenty submarines or torpedo-boats.

"The Superior Council has been invited, starting from these data, to pronounce on the types of ships which they consider should be put in hand at once; and it is in accordance with their advice that the following

proposals are made.

"It is recognised that in the matter of battle-ships the Navy is not as well provided as it should be, many of those at present on service being obsolete. As regards armoured cruisers, on the other hand, a comparatively large number are of up-to-date models. As regards small units, the number of torpedo-boats, built and building, is sufficient, and in the future it will only be necessary to make provision to replace those become obsolete; but it is necessary to push on the construction of destroyers and of submarines or submersibles of large tonnage. In view of these facts, Parliament has been asked to sanction the construction of eight destroyers in place of twenty torpedo-boats provided for in the previous Estimates, and that preparations have been made for laying down sixteen new large submersibles. Similarly in the new Estimates provision is made for laying down ten more destroyers and twenty submersibles.

"The necessity for having divisions, not only homogeneous but as far as possible identical, is the reason why it is advisable to lay down three battle-ships at once instead of, say, two battle-ships and a cruiser. The division of three units constitutes in France, as in many Navies, the elementary tactical group; it is therefore essential to lay down a division at a time. Not only should each division, but the whole squadron of six battle-ships, be homogeneous; but unfortunately the financial resources of the country do not permit our laying down six battle-ships in one year. It is, then, necessary to postpone the laying down of

the 2nd Division until 1907.

"The plans for the new battle-ships to be laid down at the beginning of next year are now nearly completed, as are those for the new

armoured cruisers to be laid down later in the year.

"The characteristics of the new battle-ships will be as follows:—Armament, four 12-inch guns, in two closed turrets; twelve 10-inch guns, in place of the eighteen 6'4-inch Q.F. guns in the "Patrie" and "République," and the ten 7'6-inch Q.F. and eight 3'9-inch Q.F. guns in the four ships of the "Liberté" class; with sixteen 2'9-inch Q.F. guns and eight 3-pounders. The armour protection will be nearly identical with the battle-ships of the "Patrie" class; the speed is to be 18 knots, and the displacement 18,000 tons.

"The dimensions of the new destroyers will be almost the same as those of the "Claymore" class, which have been very successful in their trials; but they will be slightly larger, with a displacement of some 380 tons, and a speed of 28 knots. The details of the new submersibles are not yet fully worked out; but it is believed their displacement

will be from 450 to 500 tons.

"The completion of the ships of the 1900 programme necessitates an increase of personnel which during the years 1906-7-8 will amount to 42 executive officers and 2,700 petty officers and men. In 1919, on the completion of the contemplated programme the peace effectives of the fleet will consist of 1,872 executive officers and 65,528 officers and men, increased when on a war footing to 1,985 officers and 80,076 men. The new battle-ships will require complements of about 740 officers and men, as against 675 of the "Gaulois" class.—Budget des Dépenses du Ministère de la Marine.

M. E. Lockroy on the New Programme.—The following letter has been contributed by M. E. Lockroy, ex-Minister of Marine, to the Temps:—

"The naval programme is not yet out, but we have the projet de budget, which gives us an idea what to expect.

"Concerning this programme much will have to be said, but for the present I will confine myself to a disquieting problem: that of the artillery.

"Plans were drawn up in the first instance for arming our future battle-ships with guns of moderate dimensions, such as are to be mounted in 'La Vérité' or 'La Justice'—guns of which it was said that not their least fault was inability to pierce an enemy's armour at the long ranges at which modern battles are fought. I am glad to say this has been altered; possibly the articles published in the Temps may have not been without service in the matter. Be this as it may, we must congratulate the Minister of Marine on his progressive action. Our future battle-ships are to be armed with both large and very large guns: four of 305 mm, (12-inch) and twelve of 240 mm, (10-inch). This is a great step in advance, though, be it observed, also a retrograde step, for we are returning to the armament of the earlier armour-clads and the conceptions of Dupuy de Lôme, whom, as an engineer of genius, we can fearlessly follow. Two of his armoured frigates were each provided with eight 24-cm. guns (which is our 240-mm.), and were called the 'Gauloise' and 'Guyenne.' A little later the 'Colbert' was given eight 27-cm. guns, and about this time Germany put eight 24-cm. guns on board the 'König Wilhelm.' Progress sometimes works in a circle; this return to earlier ideas may reassure the timorous who fear innovations.

"I wish, however, to make a few observations regarding the four 305-mm. guns which might, it would seem, be replaced with advantage by 240-mm. guns, thus obtaining a larger number and the great benefit of having all guns of the same calibre most desirable from the point of view of projectiles, magazine fittings, instruction of the men, etc.

"The 305-mm. has the fault of being too powerful-a good fault, but a fault all the same; so powerful a gun is not at present necessary to penetrate existing armour, and as long as possible it is advisable to choose the lightest gun that will suit present needs. In a shore battery the 305-mm. is excellent, but on board ship the extra weight entails a loss in speed or offensive power. The steel turret carrying two 305-mm. guns weighs 874 tons, whereas the weight of a turret for two 240-mm. is 423 tons. It is possible therefore for the same weight to have double the number of guns, namely, eight 240-mm. instead of four 305-mm. As regards the weight of projectiles capable of being discharged in a given time, it'is much the same for the two dimensions of guns. 240-mm., however, has the advantage that it can discharge 11 shots per minute against the 305-mm. one shot per minute, or 25 per cent. more. This result has, however, of late been improved upon. I have been informed by Commander Guye that at the Polygone du Hoc he succeeded in obtaining with the 240-mm. guns four hits on the target in 1 minute 23 seconds, thus we see the 240-mm. is becoming almost a quick-firer. There is also another reason which supports the opinion I hold. The armour belts in many ships do not rise more than 40 or 50 cm. (1 foot 7 inches) above the water-line, though in some

of the latest vessels this height is increased to 1 metre (3 feet 3 inches). I do not believe that any artillerist—even a Japanese—would hit a moving target 40 cm. to 1 metre high at a distance of 4 miles. Now our 305-mm. guns are provided with a supply of 60 rounds per gun, or 240 shots for the four guns. In experimental firing at the Polygone it has been proved that about 10 per cent. of hits may be expected with these guns, giving therefore a total of 25 hits for the full number of rounds carried; but it has also been proved that at sea, where the distance is uncertain and the movement of ship and target prevent accurate shooting, that the chances of a hit were four times less than at the Polygone. Therefore, on this basis the 240 rounds may be expected to give not more than 6 efficient hits. It is true chance may raise the number to 7, but may also reduce it to 5; so let us say Can we look forward to a successful issue of a fight with such small results?

"In the past we suffered from the same procedure that is now placing the 305-mm. gun in our ships. Our naval defeats under the Revolution and the Empire were partly due to the system of instructing our seamen to aim at the masts or at the water-line. These practices The English, on the other hand, thought less were never successful. of attempting to hit the water-line, and fired straight into the hull, with uniform success. The Japanese at Tsiu-shima did the same with equal success. The employment of heavy artillery involves fighting at long ranges, although some naval officers think it possible for an able commander to manœuvre his ships to close range. On the other hand, I have heard this matter discussed by an officer of high rank-a great authority on tactics-and his views are that in nearly every case, whatever the ability of the commander, he will perforce have to fight at long distances. Let us suppose two fleets approaching each other at a speed of 12 knots. Necessarily they would proceed on parallel lines, because as a rule ships can bring the greatest number of guns to bear on the broadside, and also because their armour, diminishing in thickness towards the extremities, offers the greatest resistance on the beam. For the fleet that wishes to lessen the distance there are, therefore, but two ways of proceeding: either to turn directly at an obtuse angle towards the enemy, or to follow an oblique line, which will gradually produce the same result. In the first hypothesis the leading ships-supposing the enemy to continue on his course-would soon arrive near his centre, and be decimated This was Rodjestby converging fire from both sides, right and left. vensky's case at Tsiu-shima. In the second hypothesis it would be necessary that the course should be very slightly varied, and then the advantages of the manœuvre disappear, because the intended reduction of distance would take too long a time to produce; in fact if the variation of the course was less than 450 (as the angle of training of many guns is small) the squadron would find itself deprived of a certain portion of its artillery. Moreover, the fore part of the hull, which is the least armoured, would be opposed to the enemy's beam, and thus, with less offensive and defensive power, the squadron would incur grave dangers.

"But whether we fight at long or short ranges there is one matter we should aim at, namely, unification of the calibre of the guns. With our different guns we have also various projectiles, cast-iron and steel, capped and not capped, shell, small, medium, and large projectiles; in fact, projectiles for every eventuality, and with all we carry a less number in our shell-rooms than any other Power, European or Asiatic. This is a serious defect which should have been avoided in the battle-ships

'Vérité' and 'Justice,' and which I hope will be corrected in all future vessels. These diverse projectiles may all act admirably when under Imagine the captain's experiment, but war is a different matter. conning-tower in action, from whence proceed all orders to the guns, helmsman, engine-room, etc. In this small box are crowded together the captain, gunnery officer, and men who transmit the orders. passing through a hail of steel, military masts are falling on the deck, funnels are pierced, and through the gaping holes the smoke is pouring. the hull trembles from stem to stern under the heavy concussion of bursting shells; splinters of iron are flying on every side, and the conning-tower itself rocks on its base. Above all this din are heard the cries and groans of the wounded and dying. Imagine the gunnery officer in the midst of all this asking through the shell-room voice-pipe: 'Have you any chilled shell left, or have we only some other description of shell?'! What really would happen is, the officer would shout down the tube: 'Send up more shell,' without bothering to particularise.

"The more we simplify our war matériel the more we increase the chances of victory. A battle is so grave an event for the country that our fighting men should never be distracted by too complicated machinery.

"Under Louis XIV. we had, as we have to-day, guns of every description and projectiles of every size. The King called to his side as Minister of Marine a certain person named Colbert. This Colbert was a strong man, and he unified all calibres."—Le Yacht, Le Temps, and Le Moniteur de la Flotte.

Japan.—Admiral Togo's Report.—Owing to its length we have been prevented from publishing earlier Admiral Togo's detailed report of the great naval battle of the Sea of Japan, which is not only of great interest, but is valuable as an historic record:—

"By the grace of Heaven and the help of the gods, our combined fleet succeeded in nearly annihiliating the second and third squadrons of the enemy in the battle that took place in the Sea of Japan on the 27th and 28th May.

"On the appearance of the enemy's fleet in the South Seas, our fleet, in obedience to orders from the superior authorities, determined upon a plan of attacking the enemy in our adjacent waters, and concentrating its force in the Korean Straits, quietly waited for the approach of the enemy. As the enemy, after a temporary sojourn on the coast of Annam, gradually came northward, I posted several scouting vessels along our southern cordon some days previous to the estimated arrival of the enemy in our adjacent waters. Meanwhile the various fighting sections of our fleet stayed at their respective bases, completely prepared for action and ready to issue forth at any moment.

"At 5 a.m. on the 27th, the 'Shinano Maru,' one of our southern scouting vessels, reported by wireless telegraph that the enemy had appeared at a point designated as number 203, and that they were apparently shaping their course toward the eastern channel of the Straits. The news was received with enthusiastic joy by the whole fleet, and the different sections of it at once commenced their hostile operations along the lines respectively laid out for them in the prearranged plan. At 7 a.m. the 'Izumi,' which had been stationed as the left wing scout of the inner cordon, also reported that the enemy had already reached a point twenty-five miles to the north-west of Ukushima, and that they were proceeding in a north-easterly direction.

"Between 10 and 11 a.m. the cruiser squadron (under Vice-Admiral Kataoka), the Togo detachment (under Rear-Admiral Togo), and the Dewa detachment (under Vice-Admiral Dewa) came into touch with the enemy between Iki and Tsushima, and notwithstanding repeated firing by the enemy, these sections of our fleet maintained uninterrupted touch with the enemy as far as Okinoshima, all the while constantly and minutely telegraphing to me about the condition of the enemy.

"In spite of the thick mist which confined the vision to within five nautical miles, the information thus received enabled me at a distance of several tens of miles to form a vivid picture in my mind of the condition of the enemy. I was thus able, before I could see the enemy with my own eyes, to know that the enemy's fighting sections comprised the whole of the Second and Third Squadrons; that they were accompanied by seven special service ships; that the enemy's ships were disposed in a double column formation; that their main strength was placed at the head of the right column, with their special service-ships at their rear; that the enemy's rate of speed was about 12 knots; that the enemy was continuing to steam in a north-easterly direction, and so forth. On the strength of this information I was able to form a mental resolution to meet the enemy with the main strength of my fleet near Okinoshima at about two o'clock in the afternoon and open the attack upon the head of the enemy's left column.

"The main strength of my fleet (viz., the battle-ship squadron, under Admiral Togo, and the armoured cruiser squadron, under Vice-Admiral Kamimura), the Uryu detachment (under Vice-Admiral Uryu), and the various destroyer flotillas arrived at a point about ten miles north of Okinoshima by about noon, and in order to appear to the left of the enemy they changed their course to west. At about 1.30 p.m. the Dewa detachment, and the cruiser squadron, still keeping in touch with the enemy, joined us one after another.

"At 1.45 p.m., I first sighted the enemy on our port side a few miles to the south. As I had expected, the enemy advanced with their main strength, consisting of four battle-ships of the 'Borodino' type, at the head of their right column, while the vanguard of the left column, consisting of the 'Osliabya,' 'Sissoi Veliky,' 'Navarin,' and 'Admiral Nakhimoff,' was followed by 'Nicolai I.' and three coast-defence ships. Between the two columns and guarding the front were the 'Jemtchug' and 'Izumrud.' To the back of all these were dimly observed through the mist over a space of several miles, a long line of ships, including a detachment consisting of the 'Oleg,' 'Aurora,' and cruisers of the second and third classes, the 'Dmitri Donskoi,' 'Vladimir Monomach,' and special service vessels, and so on. Thereupon I gave the order of battle, and at 1.55 p.m. I signalled to the vessels within the range of my vision to this effect: 'The rise or fall of the Empire depends upon the result of this engagement; do your utmost, every one of you." The battle-ship squadron turned its head for a time in a south-westerly direction so as to make the enemy believe that it meant to pass them in an opposite direction; but at 2.5 it suddenly swung round to the east, and thus, changing its front, pressed obliquely upon the head of the enemy. was soon joined at its rear by the armoured cruiser squadron, while the Dewa detachment, the Uryu detachment, the cruiser squadron, and the Togo detachment, in pursuance of the previously fixed arrangement, steamed to the south and came upon the rear of the enemy. Such was the situation at the commencement of the battle.

The Main Force.

"The enemy's van having been pressed hard by our battle-ship squad ron, changed its course slightly to the right, and at 2.8 p.m. the enemy first opened fire. We bore the fire for a while, and, reaching the range of 6,000 metres, we concentrated a fierce fire on the two war-ships which were at the head of the enemy's lines. The enemy seemed to be gradually pressed towards the south-east, and both their right and left lines gradually wended their way to the east, the enemy's fleet in consequence being formed into an irregular single column and proceeding parallel with our fleet. The 'Osliabya,' which had been at the head of the left column, was soon defeated, and fell out from the line of battle, a fire

occurring on board her.

"At this time the whole of our armoured cruiser squadron joined the battle-ship squadron towards the rear, and the concentrated fire of our entire fleet increased its efficiency in proportion to the decrease of the distance. The enemy's flag-ship 'Kniaz Souvaroff,' and the 'Imperator Alexander III.,' which was second in the line, fell off from the line, a severe fire having broken out on board those battle-ships. The confusion in the enemy's formation became more and more evident, and fire occurred on board several vessels which were bringing up the enemy's rear. smoke, carried by the westerly wind, covered the whole surface of the sea, and, combining with the fog, completely enveloped the enemy's fleet, so that our battle-ship squadron was compelled to suspend gun-fire for a Our fleet also sustained more or less damage. The 'Asama' was struck by three shells near the aft water-line. She had her steering gear damaged, and also began to leak badly. She had therefore to leave the line of battle for a while, though shortly afterwards she, having effected provisional repairs, was able to again join the line.

"Such being the features of the fighting between the opposing main forces at about 2.45 p.m., the issue of the day was already decided at that time. Our main force thus pressed the enemy to the south and maintained an intermittent fire on the enemy's vessels whenever we observed them through the smoke and fog. At about 3 p.m. our force was already ahead of the enemy's fleet, and was proceeding in a south-easterly direction when the enemy's vessels suddenly changed their course to north, and appeared as if intent on turning our rear and escaping to the north. The vessels of our battle-ship squadron therefore simultaneously turned 16 points to the left, and steamed in a north-westerly direction, the 'Nisshin' leading our column. The armoured cruiser squadron changed its front, after doubling on its own track, and followed the battle-ship squadron. The enemy was thus again pressed to the south and subjected

to a galling fire.

"At 3.7 p.m. the enemy's vessel 'Jemtchug' advanced to the rear of our armoured cruiser squadron, but severe damage was inflicted on her by our gur-fire. The 'Osliabya,' which had already been put hors de combat, was sunk at 3.10 p.m. The 'Kniaz Souvaroff,' which had been isolated, had lost one mast and two funnels, in addition to other severe damage, and was disabled, the entire ship being enveloped in smoke. The rest of the enemy's vessels had fallen into great confusion, and were wending their way eastwards, sustaining severe losses. The vessels belonging to our battle-ship squadron therefore simultaneously turned 16 points to the right, and, followed by the armoured cruiser squadron, hotly pursued the enemy, at times attacking their vessels with torpedoes. Thus the bombardment by our main force was continued till 4.55 p.m.

always driving the enemy to the south, but without any significant event worthy of mention.

"Special mention must be made of a stirring incident that took place during this period of the battle: mainly, the daring torpedo attacks made upon the enemy's disabled ship 'Souvaroff' by the 'Chihaya' and the Hirose destroyer flotilla (under Captain Hirose), at about 3.40, and by the Suzuki destroyer flotilla at about 4.45. Although the result of the former attack was uncertain, it was observed that one of the torpedoes discharged on the occasion of the latter attack struck the enemy's vessel

to the rear of the port side, causing the vessel to heel 100.

"During these torpedo attacks the 'Shiranui,' of the Hirose flotilla, and the 'Asashiwo,' of the Suzuki flotilla, were hotly fired upon by the enemy's vessels in the neighbourhood, and were each struck by a shot. They were for a time in a dangerous condition, but fortunately they were able to save themselves. At about 4.40 p.m. the enemy, probably despairing of cutting their way to the north, seemed to be gradually flying to the Thereupon the main strength of our fleet, with the armoured south. cruiser squadron at its head, pursued the retreating enemy. were soon afterwards lost sight of in smoke and mist. We thus steamed down to the south over a distance of eight miles, quietly firing upon the second-class cruisers, the special service vessels, and other ships of the enemy lingering to the right of us. At 5.30 our battle-ship squadron again turned its course to the north in search of the enemy's main force, while the armoured cruiser squadron went to the attack of the enemy's cruisers by taking a south-westerly course. These two squadrons of ours being thus separately engaged did not see each other until sunset.

"At about 5.40 p.m. the battle-ship squadron delivered an attack on the enemy's special service-ship 'Ural' which was close to the port side, and sank her. While proceeding still further northwards in search of the enemy, our squadron discovered a group of about six vesselsthe remnants of the enemy's force-flying in a north-easterly direction. Our squadron at once approached the enemy, and fought first with them in parallel lines, and then advancing ahead of the enemy, checked their The enemy, who had been taking a north-easterly course, gradually turned to the west, finally steaming towards the north-west. The fight in parallel formation continued from 6 p.m. to sunset, and while the enemy's gun-fire gradually decreased in power, the efficiency of our guns, which were fired with the utmost calmness, became more and more evident. A war-ship, presumed to be the 'Alexander III.,' was the first to fall out of the line and straggle behind. From about 6.40 p.m. a serious fire was observed on board a battle-ship of the 'Borodino' type, and at 7.23 p.m. the vessel was suddenly enveloped by the smoke of an explosion and instantly sank; presumably the fire had spread to the magazine. Meanwhile the vessels belonging to our armoured cruiser squadron, pursuing the enemy's cruiser squadron northwards, witnessed in the south a battle-ship of the 'Borodino' type, which had been disabled and had a heavy list, approach the 'Nakhimoff,' the vessel finally capsizing and sinking at 7.7 p.m. According to the prisoners of war, this vessel was the 'Alexander III." and that observed by the battle-ship squadron was the 'Borodino.'

"At that time sunset was drawing near, and our destroyer and torpedo-boat flotillas were approaching the enemy from three sides, preparatory to delivering an attack. The battle-ship squadron therefore gradually relaxed the pressure on the enemy, and at sunset (7.28 p.m.) changed the course to an easterly direction. At the same time I ordered the 'Tatsuta' to convey my orders to the entire fleet that the latter should proceed northwards and assemble at Ullondo the next morning. The engagement of the daytime was thus concluded.

Sub-divided Fleet.

"On receipt of the order at 2 p.m. to commence fighting, the Dewa, Uryu, and Togo (Masamichi) fighting detachments, as well as the cruiser squadron, separating themselves from our main fleet, steamed south in reversed lines, with the enemy on the port side, and threatened, in accordance with the pre-arranged plan, the rear of the Russian left, consisting of special service-ship and the cruisers 'Oleg,' 'Aurora,' 'Svictlana,' 'Almaz,' 'Dmitri Donskoi,' 'Vladimir Monomach,' etc. At 2.45 p.m. the Dewa and Uryu detachments, maintaining touch with each other, first opened fire in reversed lines upon the Russian cruiser squadron, and gradually making a detour to the enemy's right, across the rear, then Availing themselves of their superior speed, opened fire in parallel lines. these detachments frequently put about their heads and appeared now to the enemy's left and then to the right, thus continuing the attack for some thirty minutes. The Russian rear detachments were thus gradually thrown into disorder, and the special service-ships, after repeatedly changing their course, were at a loss as to their own disposition. In the meanwhile, a little after 3 p.m., a vessel of the 'Aurora' type rushed out of the enemy's line and threatened to attack our forces, whose fierce fire, however, succeeded in repulsing her with heavy damage. At about 3.40 p.m. three Russian destroyers again dashed towards us, but were easily driven off before they could do anything.

"The joint attack of the Dewa and Uryu detachments showed a remarkable development by 4 p.m. The rear detachments of the enemy had been completely routed, and had become separated from one another. All their vessels had sustained more or less damage, and some special service-ships had already been disabled.

"About 4.20 p.m. the Uryu detachment observed a two-funnelled Russian special service-ship with three masts, possibly the 'Anajir,'(?) standing alone, and immediately sank her. Another special service-vessel with four masts and one funnel, probably the 'Irtish, was then sighted by the same detachment, which opened fire and almost destroyed her. By this time the cruiser squadron of the Togo detachment had arrived, and they at once joined the Dewa and Uryu detachments in attacking the already routed Russian cruisers and special service-ships. At 4.40 p.m. four Russian battle-ships (or coast-defence ships), pressed from the north by our main fleet, arrived and joined the Russian cruisers, so that the Uryu detachment and cruiser squadron were for a time engaged at a short distance in an arduous fight with a powerful enemy. As a result all the vessels of these two squadrons sustained damages, which, however, were fortunately not serious.

"Prior to this the 'Kasagi,' flag-ship of the Dewa detachment, was struck below the water-line at the bunker on the port side, and commenced to leak badly. She was obliged to retire to smooth water, where she could be temporarily repaired. Vice-Admiral Dewa transferred to Rear-Admiral Uryu the command of the whole detachment, with the exception of the 'Kasagi' and 'Chitose,' which, under the command of the former, arrived at Aburadani Bay at 6 p.m. Hoisting his flag on the 'Chitose,' Vice-Admiral Dewa issued from the same bay in the evening and steamed

north, but the 'Kasagi' was unable to take part in the engagement the following day, as her repairs could not be executed in time.

"The 'Naniwa,' flag-ship of the Uryu detachment, had also been hit below the water-line in the after part, and at about 5.10 p.m. she was compelled to retire for repairs.

"By this time the enemy had been thrown into complete disorder, both in the south and north. At 5.30 p.m. our armoured cruiser squadron parting from the main forces, attacked the enemy's cruisers from the south. At the same time the enemy's war-ships fled in groups to the northward, and were pursued by the Uryu and Togo detachments and the cruiser squadron. Whilst in pursuit they found the Russian battle-ship 'Kniaz Souvaroff' and the repairing-ship 'Kamtchatka' lying disabled. The cruiser squadron and Togo detachment immediately attacked them, and the 'Kamtchatka' was sent to the bottom at 7.10 p.m. The Fujimoto' destroyer flotilla, attached to the cruiser squadron, then attacked the 'Kniaz Souvaroff.' The latter resisted to the last, firing a small gun at the stern, but she was thrice torpedoed, and eventually sank at 7.20 p.m. On the accomplishment of this task these detachments and the cruiser squadron received a wireless message ordering them to assemble at Ullondo, and therefore all the vessels steamed away in a north-easterly direction.

Torpedo Flotilla's Work.

"The night attack of the 27th was fiercely and gallantly commenced by all our destroyers and torpedo-boat flotillas immediately on the conclusion of the engagement in the day time.

"From the morning on this day a strong south-westerly gale prevailed, causing a heavy sea. Observing that the management of small vessels was rendered extremely difficult, all the torpedo-boat flotillas under my direct command were ordered to take refuge in Miura Bay, prior to the opening of the engagement in the day time. Towards evening, however, the wind considerably abated, but the sea still ran high, and our torpedoboats operating in the sea were placed at no small disadvantage. destroyer and torpedo-boat flotillas, anxious not to allow this rare opportunity to slip by, assembled before sunset in spite of the wind and waves. They yied with each other in attacking the enemy. The Fujimoto destroyer flotilla pressed hard on the enemy's van from a northern direction, the Yajima destroyer flotilla and Kawase torpedo-boat flotilla from a north-easterly direction, while the Yoshijima destroyer flotilla attacked the enemy's rear from an eastern direction, and the Hirose ('Juntaro') destroyer flotilla from a south-easterly direction. The torpedo-boat flotillas under Fukuda ('Masateru'), Otaki, Kondo ('Tsunematsu'), Aoyama, and Kawada, pursued, from a southern direction, the enemy's main squadron as well as a group of cruisers proceeding parallel to the left rear of the main squadron on the enemy's side.

"At sunset we gradually disposed our squadrons in order to envelop the enemy from three sides. Apparently giving way to the danger thus threatening them, the enemy, after sunset, fled in confusion to the southwest, and then appeared to change their course to the east. On the delivery of the first attack by the Yajima destroyer flotilla on the enemy's head at 8.15 p.m., all the destroyer and torpedo-boat flotillas rushed onward simultaneously and swarmed around the enemy, whom they fercely attacked at close range until 11 p.m. From sunset the enemy defended themselves to the utmost by gun-fire and search-lights, but

finally gave way to our attack. The enemy's ships lost sight of each other, and separately sought to escape, but were pursued by our attackers. A terrible mêlée ensued, resulting at last in the complete loss of the fighting and navigating capacity of the enemy's battle-ship 'Sissoi Veliky,' armoured cruisers 'Admiral Nakhimoff' and 'Vladimir Monomach,' all of which were torpedoed. On our side the torpedo-boat No. (commanding boat) of the Fukuda torpedo-boat torpedo-boat No. 34 (commanding boat) of the Aoyama torpedo-boat flotilla, and torpedo-boat No. 135 of the Kawada flotilla were sunk by the enemy's gun-fire while delivering the night attack. The destroyers 'Harusame,' 'Akatsuki,' 'Ikazuchi,' and 'Yugiri,' and torpedo-boats 'Sagi,' No. 68, and No. 33 sustained some damage due to the enemy's gun-fire or through collision, and for a while were prevented from participating in the operations. The casualties were comparatively large, especially in the Fukuda, Aoyama, and Kawada torpedo-boat flotillas; but the crews of the three sunken torpedo-boats were saved by their fellow boats, 'Karigane,' No. 31, and No. 61, and others.

"According to the statement since made by prisoners of war, the severity of the torpedo attack on that night was almost beyond description. Our destroyers and boats advanced in such quick succession to the attack that the enemy had no time to prepare for defence, and the distance between the attackers and defenders was so short that our boats entered within the dead angle of the enemy's guns, which therefore could not be laid on our vessels.

"In addition to the above, the Suzuki ('Kantaro') destroyer flotilla and the torpedo-boat flotillas not mentioned above, searched for the enemy in other directions. On the 28th at 2 p.m. the Suzuki destroyer flotilla discovered two of the enemy's vessels steaming northwards at a point 27 nautical miles north-east by east of Karasaki, and at once torpedoed them, sinking one. According to the statement of the prisoners, this vessel was the battle-ship 'Navarin,' which received two consecutive hits from torpedoes on each side of the hull. Other flotillas searched for the enemy in every direction throughout the night, but failed to discover any of the enemy's vessels.

Operations on the 28th.

"At dawn on the 28th the fog that had prevailed since the preceding day had cleared away. At that time our battle-ship and armoured cruiser squadrons had reached a point 20 nautical miles south of Ullondo. Other fighting detachments and the destroyer flotillas which executed the the torpedo attack during the preceding night were on their way to the rendezvous by different routes from the rear. At 5.20 a.m., when I was about to order our cruiser squadron to extend in a line of search of the east and west, in order to cut off the enemy's retreat, the cruiser squadron, which was proceeding northwards at a distance of 60 nautical miles in the rear, discovered the enemy, and reported that several streaks Immediately afterof smoke were observed in an eastern direction. wards the squadron approached the enemy and reported that the enemy's squadron consisted of four battle-ships (two were subsequently discovered to be coast-defence ships) and two cruisers, and that it was taking a It was evident that the squadron was the north-easterly direction. main force of the remaining enemy. Our battle-ships and armoured cruiser squadrons therefore changed their course, and, gradually turning to the east, pressed hard on the line of the enemy's advance.

Togo and Uryu fighting detachments also joined the cruiser squadron and guarded the enemy's rear.

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"At 10.30 a.m., at a point 18 nautical miles south of Takashima, the enemy's vessels were completely enveloped. They consisted of the battleships 'Nicholas I.' and 'Orel,' the coast-defence-ships 'General Admiral Apraxine' and 'Admiral Seniavin,' and cruiser 'Izumrud.' cruiser straggled far behind in the south and finally disappeared. enemy's vessels had been severely damaged, and were no match against our superior force, so that immediately after the opening of gun-fire by our battle-ship and cruiser squadrons, Rear-Admiral Nebogatoff, commander of the enemy's squadron, and his subordinate officers, expressed their desire to surrender. I therefore accepted this proposal, and specially permitted the officers to wear their swords. But the enemy's cruiser 'Izumrud,' availing herself of her high speed, escaped southwards prior to the surrender, but being checked by the Togo fighting detachment, she then ran eastwards. The 'Chitose,' arriving from Aburatani Bay, after sinking en route the same morning one of the enemy's destroyers, set out at once in pursuit of the 'Izumrud,' which, however, made good her escape in a northerly direction.

Prior to this the Uryu detachment, while proceeding northward, discovered at 7 a.m. a Russian war-ship in a western direction. Thereupon a section, consisting of the 'Otowa' and 'Nitaka,' under command of Captain Arima, commander of the former vessel, was ordered to attack the Russian ship. This section approached the enemy at 9 a.m. and found that the ship was the 'Svietlana,' which was also accompanied by a destroyer. The enemy's vessels were immediately pursued and attacked, the engagement lasting about an hour. At 11.6 a.m. the 'Svietlana' was sunk off Chuk-pyon Bay. The 'Nitaka,' acting in cooperation with our destroyer 'Murakumo,' which had just arrived on the scene, pursued the enemy's destroyer 'Bystri,' and at 11.50 a.m. the latter ran aground and was destroyed in an unnamed bay about five nautical miles north of Chuk-pyon Bay. The survivors from these two Russian vessels were taken on board our specially commissioned ships 'America Maru' and 'Kasuga Maru.'

"The main portion of the combined fleet which had received the enemy's offer of surrender was still in the neighbourhood of the place of surrender, engaged in the disposal of the four surrendered Russian ships, when at about 3 p.m. the 'Admiral Oushakoff' was sighted coming from The 'Iwate' and 'Yakumo' dashed forward in a southern direction. order to encounter the Russian ship. The latter then attempted to escape southward, but was overtaken at a little past 5 p.m. and was at The enemy made no reply, but at once once called on to surrender. opened fire on us. We therefore returned the enemy's fire and finally sank the vessel. About 300 survivors were rescued by us. Our destroyers 'Sazanami' and 'Kagero' discovered at about 3.30 p.m., at a point some 40 nautical miles south-west of Ullondo Island, two Russian destroyers coming from an eastern direction. Pursuing them at full speed our vessels overtook the enemy at 4.45 p.m. and opened fire on them. enemy's second destroyer thereupon hoisted a white flag as a sign of surrender. The 'Sazanami' took possession of the destroyer, which proved to be the 'Biedovi,' and found on board Admiral Rodjestvensky and his staff, who, with the crew of the destroyer, were taken prisoners by the 'Sazanami.' The 'Kagero' continued her pursuit of the other Russian destroyer until 6.30 p.m., when the latter succeeded in escaping north-

"The Uryu detachment and the Yajima destroyer flotilla, while searching for the enemy in a western direction, discovered at 5 p.m. the 'Dmitri Donskoi' steaming northward. The Russian vessel was immediately pursued, and on reaching a point some 30 nautical miles south of Ullondo Island at 7 p.m., the 'Otowa' and 'Nitaka,' together with the destroyers 'Asagiri,' 'Shirakumo,' and 'Fubuki,' were sighted in front of the enemy, coming from the direction of Chuk-pyon Bay. They passed the Russian cruiser from a western direction and opened fire on her, thus placing her between two fires. The heavy firing continued till after sunset. The enemy's ship, though greatly damaged, was not sunk, and when night came she was lost sight of. After the firing was over the 'Fubuki' and the Yajima destroyer flotilla repeatedly attacked the Russian ship. Though the result of the attack was not then clear, the 'Dmitri Donskoi' was on the following morning discovered sunk off the south-eastern coast of Ullondo Island. The survivors from her had landed on the island and were subsequently taken on board the 'Kasuga' and 'Fubuki.'

"While the main portion of the combined fleet was engaged in the work of pursuit in the north, there were, in the south, also some captures at the scene of the previous day's engagement. Early on this day the special service-ships 'Shinano Maru,' 'Tainan Maru,' and 'Yawata Maru,' which had been despatched for the purpose of clearing the scene of the engagement, discovered at a point some 30 nautical miles northeast of Karasaki, the enemy's battle-ship 'Sissoi Veliky,' which was in a sinking condition, owing to the damages sustained during the previous night. The necessary measures to capture her were immediately taken, and the survivors were rescued by us. The ship finally sank at 11.5 The destroyer 'Shiranui' and the special service-ship 'Sado Maru' met at about 5.30 a.m. at a point some five nautical miles east of Kotosaki, Tsushima, the 'Admiral Nakhimoff,' which was in a sinking condition, and subsequently discovered the 'Vladimir Monomach,' which had a considerable list, approaching the vicinity of the same point. 'Sado Maru' took measures to capture the two ships. But both of them were water-logged, and after the removal of their crews to our ships, they sank, one after the other, at about 10 a.m. At about the same time the Russian destroyer 'Gronky' also appeared in that neighbourhood, but suddenly changed her course northward in order to escape. The 'Shiranui' pursued her, and acting in co-operation with the torpedoboat 'No. 63,' silenced the enemy's guns and captured the destroyer off Ulsan at about 11.30 a.m., taking her crew prisoner. This vessel was also severely damaged, and she subsequently sank at 12.43 p.m.

"After the battle our gun-boats and special service-ships instituted a search along the coasts, near the scene of the engagement, and rescued a large number of the crews of the enemy's sunken war-ships. Taken altogether with the prisoners from the five war-ships captured in this battle, the total has already reached 6,000.

"The above is the outline of the naval battle from the afternoon of the 27th of May to the afternoon of the 28th. Afterwards a portion of our fleet searched for the enemy far in the south, but could not discover any of the enemy's vessels. The enemy's fleet, which attempted the passage of the Sea of Japan, consisted of thirty-eight vessels, and only a few cruisers, destroyers, and special service-ships escaped from being sunk or captured by us. The losses of our fleet during this battle continuing for two days, were three torpedo-boats only. There are some vessels which have sustained more or less damage, but none of them are unfit

for future service. Our total casualties throughout the fleet amounted to 116 officers and 538 wounded. The details have already been reported.

In this encounter the enemy's force did not show much disparity as compared with ours, and the enemy's officers and men, it must be admitted, fought with the utmost energy on behalf of their country. The fact that in spite of these circumstances our combined fleet has been able to win a victory and achieve such a miraculous success as above described, must be attributed to the illustrious virtues of H.M. the Emperor, and not to any human power. In particular, I cannot but thank the unseen protection of the spirits of our Imperial ancestors for the smallness of the losses sustained by our fleet and men. Even our officers and men who advanced and fought so gallantly against the enemy and fought so fiercely, seem, now that the results of the battle are known, almost at a loss how to express their feelings at the wonderful victory.

Comparative Statement.

THE ENEMY'S SHIPS AND THEIR FATE.

1. Battle-ships, eight; whereof six were sunk (the 'Kniaz Souvaroff,' the 'Alexander III.,'' the 'Borodino,' the 'Osliabya,' the 'Sissoi Veliky,' and the 'Navarin') and two were captured ('Orel' and the 'Nicholas I.').

z. Cruisers, nine; whereof four were sunk (the 'Admiral Nakhimoff,' the 'Dmitri Donskoi,' the 'Vladimir Monomach,' and the 'Svietlana'); three fled to Manila and were interned (the 'Aurora,' the 'Oleg,' and the 'Jemtchug'); one escaped to Vladivostok (the 'Almaz'); and one became a wreck in Vladimir Bay (the 'Izumrud').

3. Coast-defence ships, three; whereof one was sunk (the 'Admiral Oushakoff') and two were captured ('the 'Admiral Apraxin' and the 'Admiral Seniavin').

Destroyers, nine; whereof four were sunk (the 'Buini,' the 'Bystri,' the 'Gronky,' and one other); one captured (the 'Byedovi'); one went down on account of her injuries when attempting to reach Shanghai (the 'Blestyaschtchi'); one fled to Shanghai and was disarmed (the 'Bodri'); one escaped to Vladivostok (the 'Bravi'); and the fate of one is unknown.

4. Auxiliary cruiser, one; which was sunk (the 'Ural').

5. Special-service steamers, six; whereof four were sunk (the 'Kamtchatka,' the 'Iltis,' the 'Anadir,' and the 'Russi'); and two fled to Shanghai, where they were interned (the 'Korea' and the 'Sveri').

6. Hospital-ships, two; which were both seized, one (the 'Kastroma') being subsequently released, and the other (the 'Orel') made prize of war.

Recapitulation.

Thirty-eight ships. Twenty sunk. Six captured. Two went to the bottom or were shattered while escaping. Six disarmed and interned after flight to neutral ports. One fate unknown. One released after capture. Two escaped."

Loss of the "Mikasa."—The destruction of the Japanese battle-ship "Mikasa," Admiral Togo's flag-ship during the late war, at Sasebo, on 11th September, serves as a tragic climax to her brilliant performance against the Russian fleet, and is really the severest naval loss that Japan has suffered since hostilities began. The fire seems to have started at

the base of the "Mikasa's" mainmast on the night of 10th September, and spread with great rapidity in spite of all efforts to control it, and about two o'clock on the morning of the 11th the aft magazine exploded, tearing a great hole in the side of the ship, which immediately sank in shallow water. It is reported that 251 men were lost in the ship, and 343 were wounded.

The "Mikasa," a sister-ship to the "Asahi," was a first-class battleship. She was launched from Vickers' yard at Barrow, in 1900. She was of 15,260 tons displacement, 436 feet long over all, 76 feet beam, and 29 feet 3 inches draught. Her belt armour amidships was 9 inches thick, tapering at the end to 4 inches. The main deck battery was protected by 6 inches of citadel armour, extending from the top of the belt to the upper deck. It entirely screened the 6-inch guns on the fighting She carried four 12-inch breech-loaders mounted in pairs fore and aft in armoured barbettes, 14 inches thick above the upper deck, and 10 inches thick below; fourteen 6-inch firers, ten in the citadel and four in casements on the upper deck; twenty 3-inch, six 3-pounders, and six 21-pounders. Her four torpedo tubes were The "Mikasa," as the flag-ship of Admiral Togo, rendered submerged. noble service in the battle fought off Port Arthur in 1904, on which occasion the admiral's ship also suffered the greatest loss, a total of four officers and twenty-nine men mortally wounded, and a large number slightly wounded.

In the battle of the Sea of Japan, the "Mikasa," as the flag-ship of Admiral Togo, was the most daring and consequently the heaviest loser of any of the Japanese vessels in the conflict. Flying the signal, "The destiny of our Empire depends upon this engagement. You are all expected to do your utmost," the "Mikasa" steamed directly into the Russian line; as a result of the battle, the flag-ship suffered a loss of sixty-three killed and wounded. The "Hatsuse," a sister-ship of the "Mikasa," was sunk on 15th May, 1904, by striking a Russian mine while

cruising off Port Arthur.

MILITARY NOTES.

Home.—The following are the principal appointments which have been made:—

Major-Generals—Major-General A. H. Utterson, C.B., to be Colonel of the Leicestershire Regiment. Major-General Sir E. T. H. Hutton, K.C.M.G., C.B., from h.p., to be a Major-General in charge of Administration. Major-General Sir W. G. Knox, K.C.B., from h.p., to Command the 8th Division.

Colonels—Lieut.-Colonel and Brevet Colonel J. W. Hawkins, from i.p., to a Staff Officer for Horse and Field Artillery, and is granted the substantive rank of Colonel in the Army. Colonel (temporary Brigadier-General) R. M. Greenfield, to be a Brigade Commander in India, retaining the temporary rank of Brigadier-General whilst so employed. Lieut.-Colonel and Brevet Colonel W. Tylden, from h.p., to be a Staff Officer for Horse and Field Artillery, and is granted the substantive rank of Colonel in the Army. Lieut.-Colonel S. Frewen, from h.p., to be a

Lieut.-Colonel and Brevet Colonel T. L. N. Morland, C.B., D.S.O., is granted the substantive rank of Colonel in the Army on appointment as Inspector-General of the West African Frontier Force, with the temporary rank of Brigadier-General whilst so employed. Lieut.-Colonel and Brevet Colonel C. R. Simpson, from h.p., to be an A.A.G., and is granted the substantive rank of Colonel in the Army. Colonel and Brevet Colonel A. H. Thomas, C.B., D.S.O., from the Army Service Corps, to be an Assistant-Director of Supplies and Transport, and is granted the substantive rank of Colonel in the Army. Lieut.-Colonel and Brevet Colonel T. J. O'Dell, C.M.G., from h.p., to be an Assistant Director of Supplies and Transport, and is granted the substantive rank of Colonel in the Army. Lieut.-Colonel and Brevet Colonel E. H. H. Allenby, C.B., from 5th (Royal Irish) Lancers, to be a Brigadier-General to Command the 4th Cavalry Brigade, and is granted the substantive rank of Colonel in the Army, and the temporary rank of Brigadier-General whilst so employed. Colonel (temporary Brigadier-General) S. B. Beatson, C.B., I.A., Inspector-General Imperial Service Troops, is granted the rank of Major-General in the Army.

Construction of Railway Trestle Bridges by Royal Engineers .- In July, 1904, and July, 1905, a railway trestle bridge was constructed by the 1st, 2nd, and 3rd Bridging Companies, Royal Engineers, as part of their annual training, over a gap near Curzon Bridges (about 1 mile from Pirbright Camp). It was designed to carry a 3-foot 6-inch railway, and was made in 4 tiers, viz., 3 tiers of wooden trestles resting on a bottom tier of pile piers driven 5 feet deep into the ground. of the 4 tiers was 10 feet high, so that the bridge was 40 feet high at the deepest part; and the span was 334 feet. The timber was all felled at the back of the Ash Ranges, whence it was transported to the site of the bridge, distant 21 miles.

The method of construction was as follows:-The whole of the piers of the bottom tier were driven, and a capsill fixed on the top of each. Longitudinal stringers were then spiked down to these, placed so as to come immediately below the legs of the trestles of the next tier. trestles of the second tier had meanwhile been made, and were then placed in position, those in the centre being lifted by derricks, and those at the ends of the bridge being slid out and then lifted upright by derricks. Stringers were again fixed as for the first tier, and then the 3rd and 4th tiers placed in a similar manner. The bridge was further braced longitudinally by the addition of timbers spiked diagonally

to the legs of each trestle.

The first two tiers were erected in July, 1904, and the bridge com-

pleted and line laid the following July.

As only 2-foot 6-inch gauge trollies were available for testing the bridge, the gauge was reduced to 2 feet 6 inches instead of 3 feet 6 inches. Two of these trollies were connected tegether, giving a 9-foot 8-inch wheel base, and were loaded up with 10 tons of rails to represent a 2-foot 6-inch gauge engine, and where hauled across the tridge several times at varying rates. The deflection caused was found to be 1 inch, and there was no trace of any settlement or disruption in the bridge after the test.

The average daily number of non-commissioned officers and men employed on the bridge was 120; and the number of working days taken in its construction, including the cutting and carrying of half the timber

required, was 271 days.

CANADA.—The New Ross Rifle.—The new Ross rifle, which is being placed in the hands of the Canadian Militia, is a great improvement over the Lee-Enfield, and after some thorough tests is very highly praised by those who have tested it. The sights on the new rifle come in for special praise. There is a permanent vernier attachment to secure accurate measurements, and the ingenuity displayed in this mechanism is fairly marvellous. When the vernier is rightly adjusted, so as to accurately gauge the variations of wind and weather, as well as the sight being adapted to cartridge conditions, the adjustment will hold good for all ranges. The old rifle necessitated the carrying of a vernier or micrometer, and adjustments are made with considerable loss of time and patience. In the Ross rifle a simple slight twist on the permanent vernier is all that is required. The new Ross rifle avoids changing the adjustment for various ranges, once the proper conditions have been This rifle is also sighted on a single scale from point complied with. blank to 2,200 yards in comparison with a sighting up to 500 yards on the lower scale on the old make in use, and from 600 to 1,800 yards when the upper scale is reached. The exasperating time consumed in changing from 500 yards to longer distances is thus avoided. feature in the sighting of the Ross rifle, which again needs to be compared to be appreciated, is the position taken by the slide in obtaining new distances. It is permanently locked by means of small notches. Ordinary rifles depend entirely upon friction, and inaccuracies often ensue. A convenient wind gauge properly graduated is also added to the sighting arrangements, which is a distinct boon to users. The Ross rifle is equipped with what is technically known as "the straight pull" action, which permits of the rifle being retained at the shoulder till the magazine is empty. It is said that this renders the rifle doubly effective, inasmuch The magazine system of loading also as the shooting is twice as rapid. saves about half the time required to accomplish this in other makes. Access to the inside of the magazine can always be instantly obtained for an effective cleaning. The controlled lifting feature also gives absolute safety against any possibility of magazine jamming. The breech action is made exceptionally strong so as to give ample strength against any possible future increase in cartridge pressure. The Ross rifle is specially designed to overcome the disturbing influence of barrel vibration by means of a bolt locked close to the breech on both sides, thus distributing the pressure evenly. Although light in weight, which is a desideratum, the Ross rifle, through its perfect balance, has only a slight perceptible recoil, much less than other ones. U.S. Army and Navy Journal.

France.—The Army Budget for 1906.—The War Minister's draft of the general Budget for 1906 is as follows:—

	T I WILLIAM	Tranco.
1st Section (Home troops)	650,788,369	
2nd Section (Colonial troops)	39,828,610	
3rd Section (Extraordinary Expenditure)	26,217,510	
, , , , , , , , , , , , , , , , , , , ,	-	716,834,489
he general Budget for last year amounted t	to :	
1st Section (Home troops)	629,289,545	
2nd Section (Colonial troops)	28,627,794	
3rd Section (Extraordinary Expenditure)	26,917,150	
		694 994 490

The 1906 Budget therefore shows an increase of 32,000,000 over that of 1905, which is made up as follows:—

Increase.

1st Section	(Home troops)	 	21,498,824	francs.
2nd Section	(Colonial troops)	 ***	11,200,816	33

Total increase ... 32,699,640

Decrease.

3rd Section (Extraordinary Expenditure)... 699,640

Increase remaining... 32,000,000

1st Section (Home Troops).

General Observations.—The effective which served as a basis for the budgetary provisions for 1906 show the following differences when compared with those for 1905:—

-		Active Army, including Sahara troops.		Gendarmerie and Republican Guard.		Horses.		
			Officers.	Men.	Officers.	Men.		
1905 190 6	***			28,929 28,949	532,405 553,782	679 679	24,046 24,083	141,725 142,798
Increase for 1906 Decrease for 1906			_20	21,377	000 00	37	1,075	
		+ 2	,397	+	37	+ 1,075		

The differences are due to the following causes:-

Active Army.

Officers.—The increase of officers arises from: An increase of 18 general officers or those of similar rank of the reserve cadre; the replacing of 9 pensioned officers, employed in the recruiting service, by officers on the active list; an increase of 4 pupil officers in the Schools of Application; doing away with the vacancies of 28 engineer officers.

This increase of 59 is compensated for by various decreases amounting, in all, to 39 officers, the most important among them being a decrease of 33 engineer sub-lieutenants, arising from the reduction of the number of pupils of the Polytechnic School drafted into the engineers.

Men.—The increase of 21,377 men is chiefly due to the calling out of the class in the first twelve days of October, instead of in the first fortnight in November; to the differences in the effective of the four classes serving with the colours in 1906; and to the variations in the permanent portion of the Army (voluntary enlistments, re-engagements, etc.) affected by the application of the law of the 21st March, 1905, on recruiting of the Army.

Gendarmerie.

The increase of 37 men is due to the formation of 9 brigades (44 men), and to a decrease of 8 men in consequence of the change of brigades.

Horses.

The increase is due to the reorganisation of the Sahara companies.

2nd Section (Colonial Troops).

General Observations.—The 2nd Section of the War Budget includes the provisions for the necessary expenditure for the maintenance of all Colonial troops quartered at home, with the exception of those detached either for technical duty with the Marine Artillery or for Colonial Staff duty in France.

Effectives.—The effectives of the Colonial troops show no difference from those of 1905.

3rd Section (Extraordinary Expenditure).

The decrease of expenditure, viz., 699,640 francs, is chiefly due to the abandonment of the credit voted for geographical service, which was satisfactorily completed in 1905; to the completion of the armament of Biserta; and to the completion of the supply of bicycles for cyclist units.—

Précis from Budget Général de l'Exercice, 1906.

The Army Manauvres in 1905.—The following is a summary of an article on this subject which recently appeared in the German journal Die Woche:—

The French Grand Manœuvres, which took place this year in two theatres of operations, the one between the Seine and the Marne, the other in Poitou and Anjou, were of special importance. The numbers taking part in them were larger than usual, and in addition, the French Army were about to make experiments in methods which were quite new to it.

The chief idea dominating the French manœuvres was to hurry nothing. With this object there was no hesitation in devoting two or three days to the development of the same action, breaking off the fight to allow the troops to rest, taking care on the following day to replace them in the same positions, which had been carefully marked by the unpires. This excellent method, which did away with all appearance of unreality in the manœuvres, was especially made use of during the two days' battle which took place near Chavagne.

Four army corps and three cavalry divisions took part in the Eastern Manœuvres; a fourth cavalry division was unable to be present owing to an outbreak of typhoid. The Western Manœuvres consisted of three army corps and one cavalry division, so that altogether France had seven army corps and four cavalry divisions in the field—effectives which are superior to those which have hitherto taken part in the German Imperial Manœuvres, which has only brought together a maximum

of four army corps and two cavalry divisions.

The Eastern Manœuvres were, perhaps the most interesting. The cavalry divisions had been formed by units of that arm belonging to various army corps; the large units taking part in the operations were the Vth (Orleans), the VIth (Châlons-sur-Marne), the XXth (Nancy) Army Corps, and a provisional one formed during the manœuvres. All these troops formed two groups, the A Group under General Hagron, and the B Group under General Dessirier. The direction of the manœuvres was entrusted to General Brugère. The general situation, on which the operations depended, was a very simple one: "A hostile Army advancing from the Meuse Department, that is to say, from the Lorraine

frontier, was marching on Paris, and a national Army from the midlands was advancing to meet it and drive it back towards the Meuse." The A Army, consisting of two army corps and two cavalry divisions, formed the left wing of the forces coming from Lorraine, and was spread out to the south of Aragonne, whilst its cavalry covered its right towards Châlons-sur-The B Army, of the same strength, debouching from the upper Seine, had, with its infantry, crossed Vandœuvre, and was marching on Bar-sur-Seine, whilst its cavalry had reached Brienne-le-Château. Thus the A Force advanced from the Marne and the B from the Seine, which resulted in a battle, commenced on the 7th, and continued on the 8th September, in the neighbourhood of Chavagne, on the Châlons-Troyes In consequence of this engagement the B Force retreated in the direction of Troyes-Piney. A series of rear-guard actions, in the course of which the greatest latitude was given to the troops, took place on the third day of the operations. Thanks to the methods pursued, those improbabilities were avoided which occur when all the phases of a battle are unfolded in the course of a few hours. On the contrary, the coming into contact, the deployments, the actual battle, and the pursuit were able to be conducted in a realistic manner. The last day's operations were meant to carry out fresh engagements in the neighbourhood of Brienne-le-Château, and which was especially devoted to the representation of the assault. With a view of affording a spectacular display to the President of the Republic, who was present, large concessions were made to the old methods.

It does not appear that certain methods drawn from the lessons of the Russo-Japanese war, and so much extolled by General Brugère in his instructions preliminarily to the manœuvres, were very deeply studied; methods dealing particularly to night marches and actions. Nothing especial was undertaken in this sense. Only one night operation need be noted, which was carried out in the presence of the higher command and of the War Minister, the chief object of which was to make use of the new search-lights recently introduced. On the other hand, frequent use was made of concentration marches, which were carried out towards the later hours of the night. The troops were regularly allowed a general rest between five and six o'clock in the morning, when coffee was issued. As a general rule the feeding of the troops was carried out perfectly.

The organisation of cyclist units, made up to the strength of a battalion, and so much praised by the French Press, does not appear to have given great results. Since the invention of motors, wireless telegraphy, and the field telephone, the rôle of the bicycle for scouting and the conveyance of orders and information has lost the importance with which it was at first invested, and the employment of these engines in great masses does not seem to be at all practicable.

Amongst other experiments also attempted during the manœuvres was the crossing of a river by means of boats made from the canvas of the tents. The new infantry valise, which is lighter and larger than the old one, the new gun, and the kepi curtain cover for the neck may also be mentioned. Finally, the French Eastern Manœuvres made an excellent impression on all impartial witnesses.

JAPAN.—Portable Tools Used in the Army.—The portable tools in use in the Japanese Army are:—The spade, length 194 inches, weight without case about 1 lb. 14 ozs., with case about 24 lbs.; the pick, length 18

inches, weight without case about 3½ lbs., with case about 4 lbs.; hand axe, length 18 inches, weight without case about 3 lbs. 7 ozs., with case about 3 lbs. 10 ozs.; folding saw, which is composed of 14 pieces altogether of 3½ inches each, and which, when put together, make a total length of just under 5 feet, weight with wooden handles and without case about 7 ozs., with case and with all accessories (file, exchange pieces, etc.) about 14 ozs.; hand wire-nippers, length 18½ inches, weight about 3½ lbs. These instruments, which are distributed to the men when commencing a campaign, have no regulation case. All these tools are made at Tokio, in the Koishikawa Arsenal.

These tools are carried 1. In the valise when on the march; 2. On the belt during an action, when the man leaves his valise behind, and only retains his cloak, his canvas for tent, his cartridges, and his rations.

The regulation method of stowing them in the valise is not strictly observed in the field, the man having entire liberty to carry the tool in the most convenient manner. In peace time, in order to habituate the soldier to the two regular systems of carrying the tool, the captain of the company always specifies which method must be adopted for maneuvre purposes. The wire-nippers are carried in the same way as the spade. In action the soldier generally hangs them to his belt by a strap, in front of the sword-bayonet. Sometimes he fixes them to the haversack, which he wears over the shoulder across the body. The tools fixed to the belt may be taken out of their cases without having to take the latter off.

The infantry company has 103 portable tools, viz.:—68 spades, 17 picks, 8 hand axes, 5 folding saws, and 5 hand wire-nippers. Its war effective being 217 men, there is about 1 tool to every 2 men. The captain decides on the men to carry them. A selection is made from volunteers to carry the wire-nippers, and it is considered a sign of

gallantry and daring to carry these instruments.

In addition to the regular portable tools, distributed amongst the companies, the infantry battalion also has in reserve, with its ammunition wagons:—48 round shovels, length 3 feet 10 inches; 16 pickaxes, length 3 feet (length of iron bead 16 inches); 8 axes. These 72 tools are carried by 2 draught horses. The infantry battalion has thus altogether 412 portable and 72 large tools, or altogether 484 tools. The regiment (3 battalion) is, therefore, provided with 1,236 portable and 216 large tools, altogether 1,452 tools, which is about half its fighting effective. No other Army has this proportion.

The Japanese cavalry is not provided with intrenching tools. The squadron is furnished with 12 hand axes, and 12 folding saws, in divisional regiments, and with 16 of each of these implements in independent

cavalry regiments.

The tools carried by men of a company of engineers are the following:—100 round shovels, 50 picks, 22 axes, 6 billhooks, 6 large hand saws, 9 folding saws, 10 hand wire-nippers, or 215 tools for a fighting effective

of 226 men. In addition the company park carries 198 tools.

The tools carried by the artillery are as follows:—a. Per field battery: 36 round shovels, 6 spades, 18 picks, 6 axes, 6 hand axes, 6 saws (European model), 6 billhooks, 1 hand wire-nippers, altogether 85 tools. b. Per mountain battery: 36 round shovels, 6 spades, 18 picks, 6 axes, 6 billhooks, 1 saw (Japanese model), 1 hand wire-nippers, altogether 74 tools.

In no war up to the present has such general use been made of tools as in the Manchurian Campaign. All training in peace time was carefully directed in this sense. The infantry and artillery were fit to

carry out all works in ordinary use, without any help from the engineers. Thus the hasty organisation of points d'appui, the construction of entrenchments, the laying down of abattis, etc., are almost always exclusively confided to the infantry, whose task it is to defend them. It carries them out with its own resources, supplemented, if necessary, by the engineer reserve tools. The construction of works with a profil exceeding 36 inches above the ground line, the making of large networks of wire entanglement, of palisades, the organisation of lines of communication, demolitions necessitating the use of gunpowder or of explosives, are generally left to the engineers, either with or without the assistance of other troops.

A translation of the Manual of Instruction in Field Works for the Japanese Infantry was published in the JOURNAL for June last, p. 680.—

Revue Militaire des Armées Etrangères.

Russia.—Combination of the Various Arms. — The Ruskii Invalid publishes a further letter on this subject (Journal for October, 1905, p.

1213) by Lieut.-Colonel Fedorov :-

"During the period of waiting round Mukden the idea of preparing the success of the offensive by the concentration of fire of a mass of artillery could not be realised, partly because the passing to the offensive without leaving the positions on the Sha-ho was impossible. The case of the employment of a mass of artillery is really exceptional, and therefore it is not surprising that when the opportune moment for its employment arose it was forgotten. Gradually the desirability of having one responsible person for directing a large quantity of artillery, even that of several army corps, was realised. All the necessary preparations were

made, orders laid down, and checkered maps distributed. "I recollect that on the 28th February and the 4th March, an attempt was made to follow this method of procedure, which, however, did not succeed, and miscarried before the orders were issued to the executive, and clearly demonstrated the impossibility of confiding to one person alone the fire direction of such a great number of guns. Therefore to judiciously direct fire the entire field of battle must be visible, which, given the extent of the positions occupied, is most difficult for the sector of a single army corps. If one is content with information sent by telephone, the dispositions will not be taken or communicated in time necessary for the corps which are in a position to carry them out, and above all, they will no longer correspond to the actual facts of the case. The desire to have the whole of the artillery directed by a single artillery commander entails the separation of the artillery and the infantry; the necessary bond between the two arms and their community of action disappears, and uncertainty arises with regard to the powers of command of each commanding officer. During the whole course of this war, although it does not stare one in the face, traces are found of the peculiarity of the three arms in peace time, and it shows itself in the lack of communication between the arms and in their mutual failure of comprehension.

"On occasions when they should all strike simultaneously, each arms acts on its own account. Infantry attacks fortified positions without any preparation for its success by artillery fire. The cavalry makes raids and movements against the enemy as though its sole object was to open his eyes to defects in his positions. The infantry, when it has obtained a success, sees itself forced to retire as quickly as possible because it has not the necessary means to hand to drive the success home. The artillery arrives to assist those who have already mot with a reverse,

but not in time to prepare an action from its inception. Whether in the detence or in the attack, the detachment or the sector of defence commander should be provided with all means for attack or defence, and should have full powers. The infantry, the artillery, and when necessary, the cavalry, should be under his entire control. In both cases the infantry acts with the artillery, under the orders of the same commander. The two arms place themselves and act as closely as possible together, in close combination. With this object a portion of the division or corps artillery is distributed amongst the attack or defence sectors, and the remainder may be held in reserve. But what distinguishes the reserve artillery from the infantry kept in reserve is that the batteries composing it, held at the immediate disposal of the officer commanding the artillery, are placed in position. The object and the obligation of the artillery reserve is to act by concentrating its fire in the sector wherever the necessity for it is felt. Consequently the positions of the artillery reserve should have as wide a field of fire as possible in the sector of the division or army corps, where a favourable spot may be found for the preparation for the attack on the key of the enemy's position. Unfortunately the conditions of service in peace time do not sufficiently permit for the training to the command of the three arms. this defect and to foster more intimate relations between the three arms, divisions and army corps should be given complete organisations, and should not be merely groups of units of various arms brought together merely to form an army corps."

Lessons of the Russo-Japanese War: Armament.—The Ruskii Invalid has published a series of unsigned articles on the lessons of the late war in the Far East. The following is a summary of one dealing with the armament of both combatants:—

The Rifle.—The Russian rifle, Model 1891, behaved well, according to all reports, and only criticisms of detail have been made with regard to it. For example, after prolonged firing, the handling of the breech became hard, and had to be eased with oil. The cleaning-rod, which is normally screwed on, was apt to become lost when firing if it had been forgotten to screw it on. The fore-sights were sometimes lost. When the breech was dirty or dusty the extractor was not always strong enough to extract the empty cartridge case; the catch of the extractor should be made with more grip. It is to be hoped that a breech system may be adopted where it would be impossible to close the breech without noticing if the magazine was empty; the Japanese rifle had such an arrangement. The cartridges were irreproachable.

Q.F. Guns.-The Russian Q.F. guns were most satisfactory as regards precision and rapidity of fire, and their range was superior to that of The shrapnel was most efficacious. These guns the Japanese gun. suffered very little damage; for instance, during eight days of continuous hot fighting at the battle of the Sha-ho, the 48 guns of the 35th Artillery Brigade had only two injuries, the one to a compressor and the other due to the action of the gas on the breech. The artillery ammunition was The shrapnel did not fulfil all requirements owing to its lack of explosive power, which caused it to be useless against walls and en-Common shell is indispensable against localities and earth-Against the latter even common shell is not always effective, unless the ground is frozen or when the parapet is made of sand bags. The Ruskii Invalid mentions the case of a house serving as an observation post which was completely demolished in one hour by 64 Japanese -common shells.

Field Mortars.—The field mortar has neither sufficient range nor precision to fight against Q.F. field artillery. It was only employed, so to speak, for directing plunging fire on special objectives whilst the field artillery kept up shrapnel fire. Both the material and the moral effect of shrapnel fire by field artillery are far greater. What is required is a gun throwing common shell on obstacles, with a range approximate to that of the field gun, as mobile as the latter, and which can use the same methods of fire.

Employment of Large Calibre Guns.—Large calibre siege guns were used by both sides for different reasons. The Russians used them because they had no common shell for field guns. The Japanese probably used them in February (a) to make a demonstration against the Russian centre, and to hold it under the constant threat of an attack; (b) to reinforce on their centre their field artillery, which was inferior in range and rapidity to the Russian; (c) to oppose the Russian siege artillery; (d) and especially to render their field artillery of their centre available to assist their left wing, which should make the decisive effort. These conjectures are confirmed by the following arguments:—

1. There only remained a small number of field guns at their centre

at the end of February.

When the Russian siege artillery was withdrawn, the 12-cm. shrapnel, which the Japanese sent from time to time behind Ling-chin-pu,

no longer appeared.

Judging by the explosives, the Japanese used old guns of various calibres, carrying all sorts of projectiles, with different fuses and explosives. It might be supposed that their intention was to abandon these guns, if the Russian centre had taken the offensive, and that they would have retired towards Liao-yang, drawing the Russians after them, in order to facilitate the task of Nogi's army. The fire of these guns, unaccompanied by shrapnel fire, merely produced a moral effect, and only caused insignificant losses.

On the Russian side the siege guns did not produce quite the effect that might have been anticipated in consequence of the bad organisation of the command. The heavy batteries were not placed under the orders of the commanders of adjacent troops, who were obliged to ask for the special authorisation of the higher command when favourable

objectives for their fire presented themselves.

In conclusion, when one's power of action may be added to by using larger calibre weapons than that of field guns, there is no reason why one should deprive oneself of them. But the employment of siege artillery in field service, to-day as formerly, cannot be regarded as normal. The presence of large calibre guns in the battles of the present war constitute special cases. At Tin-sent-chen the Japanese were able to convey them by water. At Mukden they were only able to take their large guns and heavy ammunition by means of the railway, near which they kept them. At Liao-yang and in the battles in October on the Sha-ho the Japanese had hardly any guns of large calibre, and it cannot be seriously said that they made use of them. Siege guns, including 11-inch ccast guns, had no decisive influence whatever in the battles round Mukden. For four days the Japanese kept up a continuous fire on Gu-an-tun and Kau-chen-pu; nevertheless these villages were only evacuated by their garrisons on the order from the Commander-in-Chief to retire on Mukden. The garrisons evacuated them of their own accord and without being compelled to do so. "We only abandoned our strong positions on the Sha-ho because they were turned, because the enemy

manœuvred us out of them, and in no way on account of the action of his artillery."

Machine Guns.—"Machine guns have acquired an enormous importance. Our troops preferred them to artillery. It is to be hoped that there will be 12 to 16 to every division, and that they will form distinct units, and not be attached to regiments." The Japanese brass cartridge bands were more practical than canvas ones. Infantry require machine guns that can be carried by hand. In the offensive, nothing equals them for resisting counter-attacks, on account of their material power and their moral effect.

Armes Blanches.—These rendered good service, and the sword as well as the lance. The sword is an encumbrance in the artillery. It impedes the gunners when serving the guns, and might advantageously be replaced by a dagger.

Hand Grenades.—The effect of hand grenades is confirmed. They are most useful both in attack and defence, especially so to throw on an enemy obliged to remain in a ditch. Their effect is essentially a moral one. A kind should be made that would burst with certainty on touching the ground. The type which appears to be the most handy would be that of small spherical grenades; the Japanese used those with a diameter of 5 cm.

Army Clothing and Equipment.—The Ruskii Invalid publishes the report of General Dobrjinski, commanding the 35th Division, on proposed improvements in the clothing and equipment of the Russian soldier. This report was agreed to by a Commission composed of commanders of army corps and general officers.

Clothing.—There should be two dresses: one for peace time, which should be showy, to encourage the inclination of the soldier for the military profession; the other for war, as simple as possible, and made so as not to impede his movements. This field service kit should consist of:—

A blouse tunic with a small straight collar and four pockets, two on the breast and two at the sides, to carry a watch, pocket-book, compass, papers, etc. This garment should be of a rather light yellowish-grey colour. It should be of cloth for the winter and of strong cotton stuff for the summer.

Wide trousers of the same colour, with a wide cloth belt in place of the flannel one, which the men don't like, and readily lose.

The head-dress should be: For the summer-wear a cap of the same colour as the tunic, with a soft peak and chin strap: for the winter a cloth or felt cap or hat, with a short neck cover and with ear covers, which could be fastened up. It should have on it a metal number to distinguish the regiments. The papakha has proved too heavy, and interferes with the shooting, and was so visible from a distance on account of its black colour that it was found necessary to provide a grey covering for it.

The great-coat should be less heavy than the present pattern. It should be worn over the blouse, and should be provided with a cape, and it and the great-coat should be of yellowish coloured cloth. The best method of protecting the hands from the cold is to wear woollen gloves with separate fingers, and over them cloth mittens with only the thumb and fore-finger separate. The short sheep-skin capes are heavy and often of inferior quality. They might be advantageously replaced by a kind

of jacket, either of hide or else wadded, which might be worn under the cloth blouse in great cold, when the trousers might also be wadded.

The boot provided by the administrative magazine is absolutely condemned in the report; it is merely a question of what should replace The almost unanimous opinion is that a lighter and stronger boot is necessary which could be easily pulled on and off. The best thing would be a laced shoe with a strong sole, with which a leather or waterproofed legging, coming down to the trouser-ends, should be worn. quality of the uppers and of the sole is most important. roomy boot is also necessary when resting in camp, etc., or in the event of wounds in the feet, etc. The regiment should carry with it a reserve of boots with tools and material necessary for repairs. The blacking of boots on service is a source of annovance; the blacking is not always of good quality and often rots the leather and necessitates brushes. The best thing is to leave the leather its natural colour, and to confine oneself to greasing it. In the winter it is practical to have felt boots; but this foot-gear to last should be of perfect quality and have a solid leather sole, otherwise it gives out at the end of 15 or 20 days. truest economy with regard to boots is to pay a little more in order to have good quality.

Equipment.—It should be first remembered that the Russian soldier's equipment does not include a valise. The articles, reserve cartridges, and rations are distributed between two large haversacks, which are carried crosswise on the right and left sides. The great-coat is worn in banderolle. This method, which was severely criticised even before the war, is absolutely condemned, and the report pronounces unanimously in favour of a waterproof valise, without framework, to be carried on the This valise would contain the reserve articles and back and shoulders. reserve rations, which latter would consist of: 1 day's biscuit, 2 days' tea and sugar. The distribution of the cartridges, mentioned above, entails the abolition of the haversack containing the reserve The belt plate should be replaced by a buckle with tongue. cartridges. The rigid cartridge pouches should which is lighter and easier to fasten. be replaced by supple ones of leather or waterproof canvas. should be two to carry 40 to 60 cartridges each, carried on the belt in front of the body; 1 on the breast for 60 cartridges; 1 leather reserve cartridge pouch to carry 60 cartridges, worn on the belt at the back. The latter will also contain materials for cleaning the rifle.—La France Militaire.

CORRESPONDENCE.

SPEED AS A FACTOR IN NAVAL TACTICS: A CORRECTION.

To the Editor of the JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION.

SIR.—In the last number (16th October) of the Journal of the Institution, the writer of a notice of "The Naval Annual, 1905," makes, on page 1225, the following statement:—"With some of Sir Cyprian's conclusions, especially with his views in regard to the small value of speed as a tactical and strategical factor, many officers will undoubtedly disagree—we do ourselves." Everyone, of course, has a right to have his own opinion on this and other matters; and I do not for one moment dispute the right of the author of the notice to think exactly as he

pleases on the subject in question. The Journal of the Royal United Service Institution is a serious publication, and its pronouncements on naval and military matters are likely to be credited with considerable importance. I feel, therefore, that I am justified in asking you to point out where, in the work noticed in your pages, I expressed any view at all as to the value of speed, small or great, as a tactical and strategical factor. It is not to be supposed that the writer of your notice contented himself with merely reading the marginal "heading" of the last paragraph on page 170 of the "Naval Annual," and that he did not take the trouble to read the whole passage—rather more than a page in length—to which it refers.

Anyone reading the whole passage with ordinary care will find that the "heading" in no way whatever indicated an opinion; but that it simply indicated that in the campaign of which an account had been given, nothing had occurred to show that the value of superiority in speed had established any proof of the value sometimes claimed for it. To put the whole story into a mere heading would have been absurd, readers being expected to peruse passages to which headings, necessarily highly abbreviated, refer. The passage was based on a record of facts, and in it there is only a single expression of opinion, which will be mentioned hereafter. Does the writer of your notice dispute any of the facts given in the passage in question? It would be interesting if he would show where the statements of fact are incorrect.

Does your writer dispute the statement that "officers who had made a close study of tactical questions" had long suspected that no great value as a factor in general tactics could be assigned to speed superiority? I could give the names of officers holding that opinion. It is unnecessary to give them, because they are well known to those who studied at Greenwich a couple of years ago.

Does your writer maintain that "in the domain of strategy" the value of superior speed was not thought likely to be considerable? Does he dispute the statement of facts adduced to show that in the 1904 campaign this expectation had "been only partially fulfilled"?

I do not deny that (on page 171) I did formulate a conclusion and did express views as follows:—"We should not hastily draw conclusions concerning speed. What we ought to do is to remember that it is only one of the various elements of fighting efficiency. A ship of war is intended primarily to fight and not to run away. We should, therefore, be careful not to give to any other element undue predominance over the element of offensive power in the design of a ship meant to be capable of destroying or defeating her antagonist." These are the only conclusions and views on the subject of superior speed, as distinguished from statements of fact and of actual occurrences, to which I gave expression. Do you disagree with them?

Your obedient servant,

CYPRIAN A. G. BRIDGE.

26th October, 1905.

The Editor is very glad to print Sir Cyprian Bridge's letter, as considerable misapprehension exists in regard to his position on this question. The writer of the Notice regrets very much that he read into the Admiral's remarks a meaning which they were evidently not intended to convey.

OPERATIONS IN ENCLOSED COUNTRY.

To the Editor of the Journal of the Royal United Service Institution.

SIR,—Reading the lecture by Colonel Ovens, late Border Regiment, in the May No. of the JOURNAL on "Fighting in Enclosed Country," I noticed a suggestion that the British Army should carry some tool which would be of use in the aforesaid country, or any other for the matter of that.

If Colonel Ovens saw the matchet with which the Northern Nigeria Regiment are equipped, he would, I am sure, say it was the very thing.

In the hands of the black soldiers the work done with it is simply marvellous, and at the same time it is cheap, light, and most portable, being carried on the belt in a sheath like the bayonet, only on the right-hand side of the body. With a few slight alterations, such as a wire-cutter fitted in the handle, it fulfils most purposes short of proper picks and spades, etc., and at close quarters would be a most formidable weapon.

I am sure its adoption by the British Army would be most useful, and supply a long-felt want.

I am, Sir,

Your obedient servant,

J. A. L. C.

Northern Nigeria, 2-8-05.

NAVAL AND MILITARY CALENDAR.

OCTOBER, 1905.

- 2nd (M.) H.M S. "Glory" from China paid off at Portsmouth.
- 3rd (T.) H.M.S. "Cambrian" commissioned at Haulbowline for Australian Station.
- " " H.M.S. "Powerful" commissioned at Portsmouth for Australian Station.
- 7th (Sat.) H.M.S. "Sirius" arrived at Devonport from China.
- " , 1st Bn. Duke of Wellington's (West Riding Regiment) left England for India in the "Plassy."
- 12th (Th.) H.M.S. "Assistance" stranded off Tetuan.
 - " 2nd Bn. Norfolk Regiment left England for South Africa in the "Dilwara."
- 13th (F.) 3rd Bu. King's Royal Rifle Corps left Bermuda for England in s.s. "Kensington."
- 14th (Sat.) H.M.S. "Cambrian" left Plymouth for Australia.
 - The Russo-Japanese Treaty of Peace was signed by the Emperors of Russia and Japan.
- 16th (M.) The Army Council issued an important order with regard to Cavalry commissions.
 - ,, 4th Hussars left India for South Africa in R.I.M.S. "Canning."
- 17th (T.) H.M.S. "Powerful" left Portsmouth for Australia.
- 19th (Th.) T.R.H. the Prince and Princess of Wales left England for India.
- 20th (F.) H.M.S. "Sirius" paid off at Devonport.
- 21st (Sat.) T.R.H. The Prince and Princess of Wales embarked at Genoa in H.M.S. "Renown" for India.

22nd (S.) H.M. the King, accompanied by H.M. the Queen, unveiled a memorial to H.R.H. the late Duke of Cambridge, in the Guards' Chapel, Wellington Barracks.

23rd (M.) 3rd Bn. King's Royal Rifle Corps arrived at Southampton from Bermuda in s.s. "Kensington."

26th (Th.) 1st Bn. Duke of Wellington's (West Riding Regiment) arrived in India from England in the "Plassy."

28th (Sat.) Spanish first-class armoured cruiser wrecked off Ferrol.

30th (M.) H.M.S. "Montagu" paid off at Devonport.

"", H.M.S. "Donegal" paid off from 1st Cruiser Squadron at Devonport.

31st (T.) H.M.S. "Montagu" recommissioned at Devonport for Channel Fleet.

FOREIGN PERIODICALS.

NAVAL.

Argentine Republic. - Boletín del Centro Naval. Buenos Aires: September, 1905.—Has not yet been received.

Austria-Hungary. - Mittheijungen aus dem Gebiete des Seewesens. No. 11. Pola: November, 1905 .- "Observations on the Russo-Japanese War" (continued). "The Official Report of Admiral Togo on the Battle of Tsu-Shima." "The Russo-Japanese Naval Battle of the 10th August, 1904." "Fire-Control and Observation of Fire-Effect at Long Ranges." "Foreign Naval Notes."

Brazil.—Revista Maritima Brazileira. Rio de Janeiro: July, 1905.— Has not yet been received.

Paris .- Has not been received. France.—Revue Maritime.

Questions Navales: Revue Générale de la Marine. Paris: 10th October, 1905 .- "The Naval Gallery: M. Thomson." "What Boilers to place on board Ships of War." "Our Mercantile Marine." "The Truth about our Submarines." "The Problem of Speed." 25th October. "Open Letter to the Minister of Commerce." "To the Committee of Ship-Owners." "The Defence of our Colonies." "The Claims of the Officers and Crews of the Fleet." "The Yachting Automobile." "The Problem of Speed." "Our Works Department."

La Marine Française. Paris: October, 1905. — Has not yet been

received.

Paris: 7th October, 1905 .- "Maritime Credit." "Yacht-Le Yacht. Paris: 7th October, 1905.—"Maritime Credit." "Yachting Notes." "The Protection of the Mercantile Marine" (continued). 14th October. - "International Tonnage Measurement." "Yachting Notes." "The Loss of the 'Sully." "The Protection of the Mercantile Marine" (continued). "The English Armoured Cruiser 'Natal." 21st October .- "The Construction of Submarines in France and England." "Yachting Notes." "The Entry of Executive Officers." "The Protection of the Mercantile Marine" (continued). "Launch of the German Battle-ship 'Hannover.'" 28th October.—"Contribution to the Study of the Design of the Future Battle-ship." "Yachting Notes." "The Protection of the Mercantile Marine" (continued).

Le Moniteur de la Flotte. Paris: 7th October, 1905.—"The Protection of the Future Battle-ship." "The Problem of Speed." "The Naval Programme." 14th October.—"Tuberculosis in the Navy." "The Problem of Speed." 21st October.—"The Light Armament of Battle-ships." "Flotillas of Torpedo-boats and Submarines." 28th October.—"A propos of Trafalgar." "The Protection of Battle-ships." "Promotion among the Petty Officers and Men of the Fleet."

GERMANY.—Marine Rundschau. Berlin: November, 1905. — "A Critical Examination of the Events at Pekin in 1898: A Page of China's Latest History." "The Economic and Naval Position of the United States in the Pacific" (concluded). "Something on Modern Naval Tactics." "The French Naval Manœuvres in 1905." "Explosions Under Water." "From whom the Frisians are Descended, and the Maritime History of the Netherlands." "Exchange of Views: 1. Flag-ships and their Tactical Position. 2. The Coaling Question of War-ships." "Foreign Naval Notes."

ITALY.—Rivista Marittima. Rome: October, 1905.—"The Tricolour of Italy." "The Russo-Japanese War." "Notes on the Derricks of Ships of War." "The International Navigation Congress of Milan, 1905." "A Modified Magnaghi Liquid Compass." "The Rights in the Sicilian Tunny Fisheries." "Foreign Naval Notes."

Portugal. — Revista Portugueza, Colonial e Maritima. Lisbon: September, 1905.—"The Island of Saghalien and the Russo-Japanese Peace." "The Second Colonial Congress at Berlin." "A Japanese Embassy to Europe in the 16th Century" (continued). "The Colonial Movement." "Foreign Naval Notes."

Spain.—Revista General de Marina. Madrid: October, 1905.—"The Use of High Explosives in Guns." "The Victory of Tsu-Shima." "The Sanitary State of the Fleet in 1904." "Spontaneous Fractures in Steel Projectiles." "A General Staff for the Navy."

MILITARY.

ARGENTINE REPUBLIC.—Revista del Boletín Militar del Ministerio de Guerra. Buenos Aires: 15th September, 1905.—"Practical Instruction for the Artillery." "Breaches of Discipline." "Disorders of the Digestive Organs of the Horse." "The Peruvian Army in 1905." "War Maps."

Austria-Hungary.—Danzer's Armee-Zeitung. Vienna: 5th October, 1905.—"Our new Infantry Musketry Instructions." "Macedonia and cur Monarchy." "Transport Service with the Army in the Field." "Manœuvres in Bulgaria." 12th October.—"Our new Infantry Musketry Instructions." "The French and the Allied Troops in the War of 1805." "A Posthumous Work of Brialmont." 19th October.—"Inspectors-General of Troops." "Our new Infantry Musketry Instructions" (concluded). "The Sobieski Legend." 26th October.—"Reform of the General Inspection of Troops." "Russia and Japan after the War." "The Press and Information in War." "More Concentration of Artillery Fire in Action."

Organ der Militär-wissenschaftlichen Vereine. Vienna: Vol. LXXI. Part 3, 1905.—"Instruction in Trade and Military Training." "The Railway and Telegraph Regiment during the Provisional Management of the Imperial State Railways." "Thoughts on the Modern Battle." "Military Ballooning in the South American War."

Mittheilungen über Gegenstände des Artillerie- und Genie-Wesens. Vienna: October, 1905.—"On Ballistic Apparatus." "The New Gunnery Regulations of the Russian Field and Mountain Artillery." "Portland Cement."

Belgium.—Bulletin de la Presse et de la Bibliographie Militaires. Brussels: 30th September, 1905.—"The Efficiency of Infantry Battle Fire, according to a Study by Lieut.-General Rohne." "Field Service Regulations of the Japanese and Russian Armies" (continued).

15th October, 1905.—"The Efficiency of Infantry Battle Fire, according to a Study by Lieut.-General Rohne" (continued). "Field Service Regulations of the Japanese and Russian Armies" (concluded). "Preparation and Organisation of the Chief Command in Germany and in France."

France.—Revue du Cercle Militaire. Paris: 7th October, 1905.—
"Moral Education" (concluded). "Summary of Military Events during
1798, from the Original Manuscript of Napoleon's Commentaries" (continued). 14th October.—"The new Infantry Musketry Regulations."
"Summary of Military Events during 1798, from the Original Manuscript
of Napoleon's Commentaries." 21st October.—"The Russo-Japanese
War" (concluded). "The new Infantry Musketry Regulations" (concluded). "Summary of Military Events during 1798, from the Original
Manuscript of Napoleon's Commentaries" (concluded). 28th October.—
"An Unpublished Account of the so-called Rochelle Conspiracy."
"Tactical Lecture." "The Russo-Japanese Treaty." "Employment of
the Cinematograph for the Instruction of Recruits."

Le Spectateur Militaire. Paris: 1st October, 1905.—"The Russo-Turkish Campaign of 1877-78" (continued). "The Conquest of Ménabé" (continued). "Napoleon, Bülow, and Bernadotte." "The War in Morocco." 15th October.—"The Russo-Turkish Campaign of 1877-78" (continued). "Napoleon, Bülow, and Bernadotte" (continued). "The Conquest of Ménabé" (continued). "The War in Morocco" (continued).

Revue d'Artillerie. Paris: September, 1905.—"The Sugar Ration."
"Ball Bearings and Friction Rollers of the Eighteenth Century" (continued). "Masked Field Fire."

October, 1905.—Has not been received.

Revue du Génie Militaire. Paris: October, 1905.—"Sebastopol: War of Mines." "Kites and their Military Uses" (continued).

Journal des Sciences Militaires. Paris: September, 1905.—"Three days' Operations carried out by an Infantry Division and a Cavalry Brigade, Covering the Siege of Belfort." "What should be Retained from the Russo-Japanese War" (concluded). "An Army 'Kriegspiel' in 1775" (concluded). "The Rôle and the Condition of a Non-Commissioned Officer Necessary to the Two Years' Period of Service." "Battle Preparation of the Group." "To what may the Military Successes of Joan of Arc be attributed?" "The War of Succession in Austria, 1740-43" (continued).

October, 1905.—Has not been received.

Revue de Cavalerie. Paris: September, 1905.—"Letters to Plok" (continued). "Cavalry Duties in the Field" (continued). "Leave the Platoons to their Commanders" (concluded). "In Quarters, at Maneuvres, in War." "The Action of the 16th June, 1903, near Souetel-Ma."

October, 1905.-Has not been received.

Revue Militaire des Armées Etrangères. Paris : October, 1905.—"A German Colonial Campaign." "Drill Regulations of the English Army."

Revue du Service de l'Intendance Militaire. Paris : October, 1905.— "Study on the Revictualling of the Army of the Rhine by the Vosges Department, 1792-1793." "The Army of Egypt, 1798-1799 : Administration and Description." "Butter." "Analysis of Oats."

Revue d'Histoire. Paris: October, 1905.—"Study of Infantry Tactics in the 18th Century." "The Campaign of 1793 with the Army of the North and of the Ardennes" (continued). "The War of 1870-71" (continued).

GERMANY .- Militär-Wochenblatt. Berlin: 3rd October, 1905 .- "On the History of the Brandenburg-Prussian Cavalry." "On the Rapidity of Infantry Fire." "The Death of the Russian Cavalry General, Prince Amilachwari." 5th October .- "Tactical Events of the War in the Far East, with Special Regard to Infantry." "Organisation of the Infantry Cyclist." "French Experiences with the Q.F. Gun." "The Italian Army and the Earthquake Catastrophe in Calabria." 7th October .-"Deimling's Fight in the Karas Mountains." "The Campaign of 1814." 10th October .- "The Campaign of 1814" (concluded). "Tactical Events of the War in the Far East, with Special Regard to the Infantry" (con-12th October .-- "Turkish and Bulgarian Soldiers." bution of Troops in South-West Africa." "The Hottentot Rebellion" (continued). 14th October .- "Tactical Events of the War in the Far East, with Special Regard to the Infantry" (continued). "The Redistribution of the English Cavalry." 17th October.—"A Hundred Years Ago" (continued). "Tactical Events of the War in the Far East, with Special Regard to the Infantry" (continued). 19th October .- "The Power of Personality in War." "The Hottentot Rebellion" (continued). 21st October .- "The Hottentot Rebellion" (continued). 24th October .-"The Hottentot Rebellion" (continued). 26th October .- "Tactical Events of the War in the Far East, with Special Regard to the Infantry ' (concluded). 28th October.—" Speech of His Excellency the Chief of the General Staff of the Army, at the Unveiling of the Moltke Memorial at Berlin." "The Hottentot Rebellion" (concluded). "Increase of the Russian Technical Troops." 31st October .- "The Italian Grand Autumn Manœuvres." "Intelligence from the Belgian Army."

Internationale Revue über die gesamten Armeen und Flotten. Dresden: October, 1905.—" Military and Naval Intelligence from Austria, Hungary, Argentina, France, Germany, Greece, Great Britain, Italy, Japan, Roumania, Russia, Switzerland, Turkey, and the United States." Supplement 66.—" The Reforms in the Greek Forces." French Supplement 79.—" Is the Offensive still Possible, and under what Conditions?" "Trials with Mountain Guns in Switzerland." "Two Raids in the Russo-Japanese War." "Manœuvres under Service Conditions before the Emperor at Sassuitz."

Jahrbücher für die Deutsche Armee und Marine. Berlin: Getober, 1905.—"The German Passage of the Moselle in 1870, according to French Lights." "The French Instructions for the Attack and Defence of Fortified Places." "Sandepu." "Military Sick-Nurses and Training of Re-enlisted Soldiers."

Neue Militärische Blätter. September, 1905. No. 9.—"The Medical Service in the Navy." "Lights on Morocco" (continued). "Can we Build our Navy Quicker?" "Our Garde du Korps in Africa." "Military Echoes." "Military Intelligence." No. 10.—"Defects and Efforts for Reform in the Russian General Staff." "Lights on Morocco" (concluded). "The Russian and the Japanese Soldier." "Military Intelligence." Nos. 11 and 12.— "Mounted Infantry in the Middle Ages." "Defects and Efforts for Reform in the Russian General Staff" (continued). "This Year's French Grand Naval Manœuvres." "Statement of the English War Minister." "Port Mahon and the Balearic Islands." "The French Naval Budget."

October, 1905. No. 13.—"Defects and Efforts for Reform in the Russian General Staff" (continued). "Letters of an Altenburg Lieutenant in the War of 1849." "The Caucasus as a Base of Operations, with Special Regard to India." "Ventilation of Soldiers' Quarters at Night." No. 14.—"Antwerp's Fortress." "Field Howitzers in Fortress Warfare." "The Caucasus as a Base of Operations, with Special Regard to India" (continued). "The New Russian Plan of Naval Construction." "The Transport." No. 15.—"Field Howitzers in Fortress Warfare" (continued). "The Caucasus as a Base of Operations, with Special Regard to India" (continued). "Life on Board the 'Mikasa." No. 16.—"Traflager and Ulm." "Field Howitzers in Fortress Wayfare" (continued). "The Caucasus as a Base of Operations, with Special Regard to India" (continued). "Proper Administrative Positions of Officers and Clerks."

ITALY.—Rivista di Artiglieria e Genio. Rome: September, 1905.—
"Ine Extension of the Commercial Port of Venice." "On Automatic Elevating Gear for Coast Guns." "Verona in the History of the Art of Fortifications." "On Typhus and Petecchial Fever in Horses." "The Russian Field Gun, Model 1900." "The Rexer Automatic Machine Gun." "Foreign Military Notes."

Rivista Militare Italiana. Rome: October, 1905.—"Questions Regarding Promotion in the Engineers." "The Campaign of 1859, according to the Latest Publications." "The Instruction of the Recruit." "Firing and Tactical Instruction for Field and Horse Artillery." "By the Cavalry! General Kessler's 'Tactique des trois Armes." "Luciano Manara." "The Russo-Japanese War."

Portugal.—Revista de Engenheria Militar. Lisbon: July, 1905.— "About Port Arthur." "Some Notes on the Benguella Railway." "Principal Civil Engineering Works Carried out in Portugal and the Colonies in the Year 1904."

August, 1905.—"Military Recognition of the Portuguese Frontier between the Districts of Lourenço Marques, Gaza, the Transvaal and Swaziland, the Establishment and Provision of Police Posts during the Anglo-Brer War." "Pontoon Trains." "Historical Summary on the Defence of Portugal."

Revista de Infanteria. Lisbon: October, 1905.—"The Infantry Arm" (continued). "Colonial Military Organisation." "The Instruction of Officers." "Corporals." "Lessons of the Russo-Japanese War" (continued). "Mounted Infantry."

Russia.—Voiénnyi Sbornik. St. Petersburg: July, 1905.—"Contribution to the History of 1812" (continued). "Biography of Count L. L. Leningsen" (continued). "Notes on Sebastopol, 1854, 1855, and 1856" (continued). "Fundamental Idea of a Plan of War: Strategic Study." "On the Physical Development of the Infantry Soldier." "On the Determination of the Artillery Garrison of a Fort." "Note on Military Telegraphy." "Remarks of a Japanese Sailor on the Japanese and Russian Fleets." "A Field Diary." "The War with Japan."

August, 1905.—"Contribution to the History of 1812" (continued). "Biography of Count L. L. Beningsen" (continued). "Notes on Sebastopol, 1854, 1855, and 1856" (continued). "Remarks on the Battle Efficiency of our Infantry." "On the Determination of an Artillery Garrison of a Fort" (continued). "The Fortress in the Napoleonic Wars, and in Recent Times." "The VIth Siberian Corps in the Actions on the River Cha-Khé, from the 25th September to the 4th October, 1904." "A Field Diary" (continued). "The War with Japan." "Plans for Reform in the Anglo-Indian Army, and their Execution."

September, 1905.—"Contribution to the History of 1812" (continued).

Spain.—Memorial de Ingenieros del Ejército. Madrid: September, 1905.—"Balloons." "Studies in Fortification: The Moat." "The Liége Exhibition." "Study for a Bridge of Armoured Cement."

Revista Técnica de Infanteria y Caballeria. Madrid: 1st October, 1905.—"General Zarco del Valle (1785-1866)" (continued). "Effective Soldiers that the Population of Spain can Supply." "The Cavalry and Firing Instruction." "Colonel Cristóbal de Mondragón." "The Formation of the German Officers-Corps." 15th October.—"The Formation of the German Officers-Corps" (concluded). "The Cavalry Manœuvres of 1904." "The Necessity for Increasing the Effective of the Permanent Force." "Deductions from the Firing Exercises of Field Artillery." "The Cavalry and Firing Instruction" (continued). "The Tactical Offensive."

Revista Cientifico-Militar y Biblioteca Militar. Barcelona: October, 1905.—"President Loubet in Spain." "The Entry to the Military Academies." "The Supply of Ammunition on the Field of Battle." "Modern Ideas on the Employment of Field Artillery." "Complaints!" "Order of the Day of the Director-General of the Manœuvres carried cut by the French Army of the East."

Switzerland.—Revue Militaire Suisse. Lausanne: October, 1905.—Has not been received.

United States.—Journal of the United States Infantry Association. Washington: October, 1905.—"The Recruit Depôt, Columbas Barracks, Ohio." "Field Service in Minkanao." "Marching." "Rôle of Machine Guns in Modern War." "Annual Athletic and Gymnastic Tests for the Army." "Physical Training in the Army." "How to Obtain a Good First Sergeant." "A Plea for the Emergency Ration." "Elevation and Windage Charts." "Combination Intrenching Tool and Wire

Cutter." "The New Infantry Drill Regulations." "Reprints and Translations."

Journal of the United States Cavalry Association. Fort Leavenworth, Kansas: October, 1905.—"The Service Pistol and its Calibre." "Pistol Shooting." "Some Indian Experiences." "The Yellowstone Expedition of 1873." "Five Years a Dragoon" (continued). "Reprints and Translations." "Military Notes."

The United Service. New York: October, 1905.—"Old France and Young America: Campaign of Vice-Admiral D'Estaing in 1778." "Jack Hilton's Love Affair." "British Naval Policy and German Aspirations." "The Strategy and Tactics of the Russo-Japanese War." "Some Military Reminiscences of the Rebellion." "Service Salad." "W. F.

Draper, Brigadier-General, U.S. Volunteers."

NOTICES OF BOOKS.

With the Green Howards in South Africa, 1899-1902. By Major M. L. Ferrar (Alexandra, Princess of Wales's Own Yorkshire Regiment). Crown 8vo. London: Fisher & Co.

This book, one of several which deal with the services of individual units, chronicles the services in the Boer War of the 1st Battalion Princess of Wales's Own Yorkshire Regiment—the old 19th—a regiment which went through the campaign with much credit. This particular class of publication is much to be welcomed. It fills a hitherto prominent gap in military history. The general history of a campaign is sure to find a capable compiler, who will do ample justice to the services of brigades and even individual units. But the reader of military history, and the student, and especially those of junior rank, thirst for something more They want to know more of the work and the leadership of the battalion, the company, and the sections, and a book such as Major M. L. Ferrar's account of the doings of the 1st Yorkshire Regiment affords a good opportunity for the provision of such information. regiment had its full share of fighting, first with French at Colesberg, then at Paardeberg, and in the advance to Bloemfontein, to Pretoria, and eastwards, and in the Crocodile Valley. It earned a Y.C., a C.B., six D.S.O.'s, seven brevets, and sixteen Distinguished Conduct medalsin itself an indication of good and gallant service.

With the Inniskilling Dragoons. The Record of a Cavalry Regiment during the Boer War, 1899-1902. By Lieut.-Colonel J. WATKINS YARDLEY (Late Inniskilling Dragoons). 8vo. London: Longmans, Green & Co.

This book, compiled from notes made at the time, is an exceedingly interesting and accurate description of the life a typical cavalry regiment ir. South Africa. In using the word typical, services are implied which are typical of a good regiment, for the Inniskillings is distinguished alike in peace and war. A regiment that can perform services such as the Inniskillings did in the Boer War, and can win the Inter-Regimental Polo Cup at Hurlingham, is one of no mean capacity. Of the many so-called lessons which were supposed to have been learned during the war, one which gained converts amongst officers who ought to have known better, was, that the days of cavalry were passed. If there are any who still

attach any credence to the theory, let them read this account of the work of the Inniskillings, and they will possibly arrive at quite a different conclusion. The cavalry arm, in combination with the other two arms of the Service, is as absolutely essential to success in modern war as it ever has been, not that the events of the Boer War produced any very striking lessons to that effect. Colonel Yardley has written a very readable and instructive narrative of the services of his regiment, which, whether in the field, reconnoitring, on outpost duty, in the trenches, or on trek, proved itself a good and reliable one. The men were steady under fire, cool and collected, and in attacking exhibited commendable dash. Their losses were correspondingly heavy, for six officers and thirty-seven men were killed in action, and twelve officers and seventy-nine men were wounded. The book is written in a simple, unaffected manner, and gives a good idea of some of the work done by our severely criticised cavalry in the war.

Historical Records of the Buffs (East Kent Regiment). Vol. I., 1572-1704.

By Captain H. R. Knight, p.s.c., late The Buffs. London: Gale & Polden. Price, 25s.

ane Buffs is one of the most ancient and distinguished of British regiments, and has long wanted a capable historian. Regimental histories are of various kinds. Mr. Cannon's, not always to be relied upon, were written to the order of the War Office, and were sketchy; there are others, compiled by enthusiastic officers, which frequently err in excessive detail; and finally, we have those like Mr. Fortescue's history of the 17th Lancers, and Colonel Greenhill-Gardyne's story of the 92nd Highlanders, which are extremely well written in an easy and readable style, attractive alike to soldiers and civilians, and which are remarkable for their general accuracy. Captain Knight, if one may say so, labours under the disadvantage of extreme enthusiasm, the result that his book exceeds the limit He has compiled his history with regimental record. taking application and care, but he has produced a book which it is feared may not attract the average officer. It forms an excellent record of a very distinguished regiment to preserve at headquarters for reference; but it is more than doubtful if it will find a ready sale outside a limited circle. It is not every regimental officer who cares to carry about with his limited allowance of personal baggage three bulky volumes, with the doubtful satisfaction of being required to pay £3 15s. for the privilege. The present volume consists of twenty-six chapters, exclusive of appendices and index, and to show how thoroughly Captain Knight has entered into the subject, we are only taken as far as the year 1704; but these pages include the important battles of Steinkirk, Landen, Schellenberg, and Blenheim, in which the Buffs played a part, of which they may justly feel proud. Captain Knight gives an intelligent and clear description of these engagements, and accompanies them with excellent plans. He has also compiled, at much labour, a nominal roll of the officers of the regiment between 1665 and 1704, and has enhanced the value of the volume generally by an excellent index.

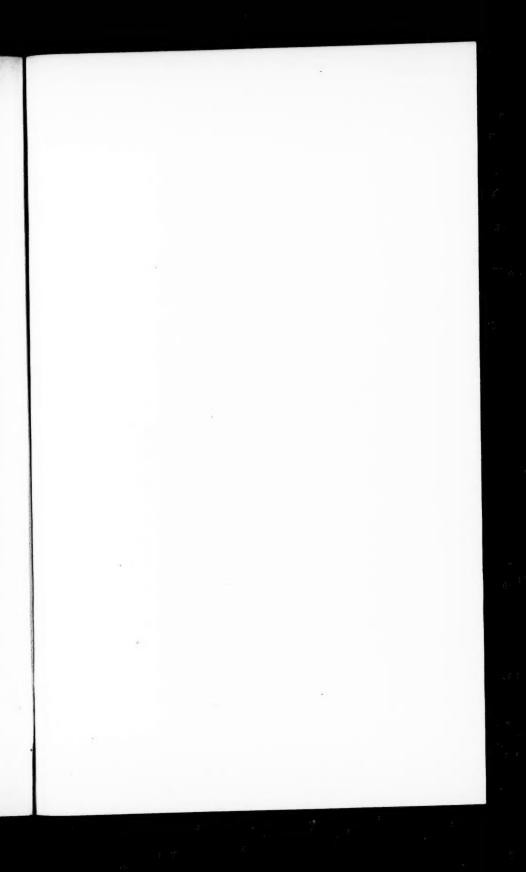
PRINCIPAL ADDITIONS TO LIBRARY, OCTOBER, 1905.

Hints on Working Out Tactical Problems. By Lieut.-Colonel H. M BRUNKER. 5th Edition. Crown Svo. 5s. (Holbrook & Son, Ltd.) Portsmouth, 1905.

- Guide to Military History for Examinations. Part I.: Peninsular War, 1808-10. By Captain G. P. Λ. PHILLIPS. 8vo. 3s. (Presented.) (Gale & Polden.) Aldershot, 1905.
- Report on the Manuscripts of Lady Du Cane. Historical Manuscripts Commission. 8vo. 2s. 6d. London, 1905.
- Text Book of Topographical and Geographical Surveying. By Major C. F. Close. Official. Svo. 3s. 6d. (Presented.) (Harrison & Sons.) London, 1905.
- Appendix to Training Manuals. Official. Demy 12mo. 1s. (Presented.) (Harrison & Sons.) London, 1905.
- Handbook of the Egyptian Army. Compiled for the General Staff, War Office, in the Intelligence Department, War Office, Cairo. Demy 12mo. (Presented.) (Harrison & Sons.) London, 1905.
- L'Esprit de la Guerre Moderne—La Manœuvre de Vilna. By General H. Bonnal. 8vo. 3s. 5d. (Librairie Militaire, R. Chapelot et Cie.) Paris, 1905.
- Story of the Campaigns in the Peninsular, from June, 1808, to the End of 1810. By Lieut.-Colonel H. M. Brunker. 8vo. 7s. 6d. (Forster, Groom & Co., Ltd.) London, 1905.
- The Life and Times of Niccolo Machiavelli. By Professor P. VILLARI.

 Translated by Linda Villari. 3rd Impression. 8vo. 2s. 6d.
 (T. Fisher Unwin.) London, 1905.
- A Short Record of the Royal Sussex Regiment from 1701 to 1905. Demy 12mo. 1s. (Presented.) (Waterlow & Sons, Ltd.) London, 1905.
- My Experiences of the War Between France and Germany. By Archi-Bald Forbes. 2 Vols. 8vo. (Hurst & Blackett.) London, 1871.
- Verkehrs-, Beobachtungs- und Nachrichten-Mittel in Militärischer Beleuchtung für Offiziere aller Waffen des Heeres und der Marine. By W. Stavenhagen. 2nd Edition. 8vo. (Presented.) (Hermann Peters.), Leipzig, 1905.
- The Siege and Fall of Port Arthur. By RICHMOND SMITH. 8vo. 12s 6d. (Eveleigh Nash.) London, 1905.
- An Eye-Witness in Manchuria. By Lord Brooke. 8vo. 7s. 6d. (Eveleigh Nash.) London, 1905.
- Life of Lieut.-General the Hon. Sir Andrew Clarke, G.C.M.G., C.B., C.I.E., By Colonel R. H. Vetch. Svo. 15s. (John Murray.) London, 1905.

- With the Russians in Manchuria. By MAURICE BARING. 8vo. 7s. 6d. (Methuen & Co.) London, 1905.
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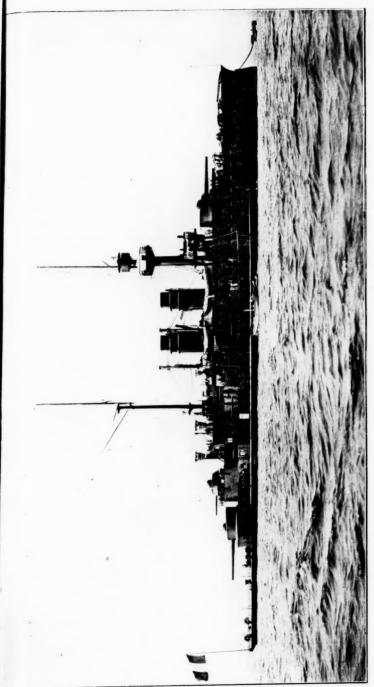




BARR AND STROUD RANGEFINDER, F.G. TYPE, "INFANTRY," 1 METRE BASE-FOR USE WITH INFANTRY CAVALRY, AND MACHINE GUNS

This Rangefinder is constructed largely of Aluminium and is covered externally with brown leather. It is fitted with pads on the ends to prevent damage by rough handling. It is supplied in a strong leather case, as shown, fitted with a shoulder-strap.

The tripod shown in the illustration is not supplied with the instrument, as the Rangefinder is so constructed that it can be used with ease without a stand.



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ARMOUR PROTECTION.—Complete bolt of hard steel from 3 feet above water-line to 4 feet 5 inches below, 11.7 inches thick risk and 11.7 inches; above, extending from a little abaft the least to fine the feet inches thick, risk of 11.7 inches thick risk of 11.7 inches the feet forward. Turrets by the wo heavy guns, 10-inch; turret bases, 12-inch; central battery, 4-inch; counting towe, 3-inch; a smooth flower and below main belt, 3- and 3-inch; the side is also a monored lightly ambelly a belt, as protection against torpedoes.

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